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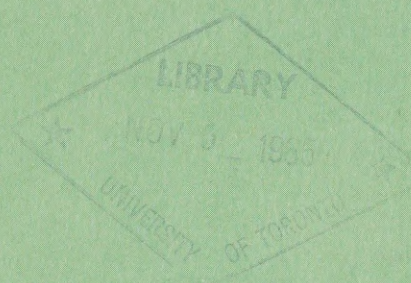
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OCEAN WEATHER STATION "P" NORTH PACIFIC OCEAN

October 31, 1964 to January 26, 1965

No. 8

1965 Data Record Series

Canada (Canadian) Oceanographic Data Centre

Programmed by the
Canadian Committee on Oceanography

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NORTH PACIFIC OCEAN

October 31, 1964 to January 26, 1965

CODC Reference: 02-64-010

No. 8 - 13

1965 Data Record Series

Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography

FISHERIES RESEARCH BOARD OF CANADA

Ocean Weather Station "P" North Pacific Ocean

Ships: CCGS "St. Catharines" CCGS "Stonetown"

Local Cruise P-64-4 Patrol No. 63
designations:

Cruise periods: Oct. 31-Dec. 15, 1964 Dec. 12, 1964-Jan. 26, 1965

Observer: Mr. A.R. Stanley-Jones

PACIFIC OCEANOGRAPHIC GROUP - Nanaimo, B.C.

SECTION I

Description of data collection procedures



Figure 1.

The Canadian Weather Ship C.C.G.S. " St. Catharines " .

(D.O.T. Photo)

The oceanographic winch is located on the starboard side of the signal deck, just aft of the bridge wing.

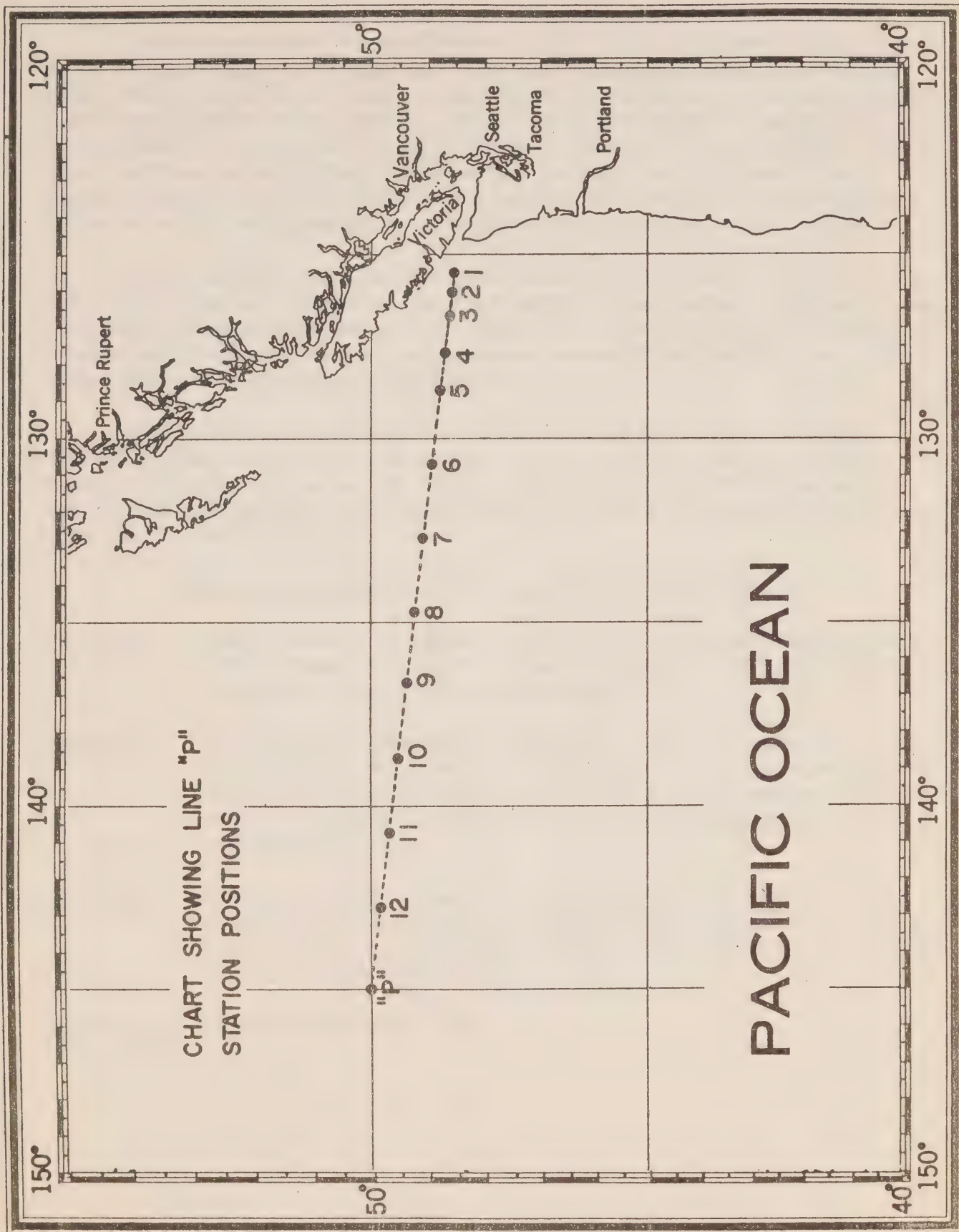


Figure 2.

The Canadian Weather Ship C.C.G.S. "Stonetown".

(D.O.T. Photo)

Bathythermograph soundings boom can be seen below the bridge on the signal deck.



INTRODUCTION

Canadian operation of Ocean Weather Station "P" (latitude 50°00'N, longitude 145°00'W) was inaugurated in December 1950. The station is manned by two vessels of the Canadian naval frigate class operated by the Marine Services of the Department of Transport. They are the CCGS "St. Catharines" and the CCGS "Stonetown" (Fig. 1 and 2) (Atlantic Oceanographic Group, MS, 1961). Each ship remains on Station for a period of 6 weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch. The chief purpose of the Station is to operate as a meteorological station for surface and upper-air observations, and as an air-sea rescue station.

Twice-daily bathythermograph observations have been made at Station "P" since July 1952. A program of more extensive oceanographic observations at Station "P" was commenced in August 1956. Since April 1959 a series of ten oceanographic stations has been frequently observed along the route between Station "P" and Swiftsure Bank. This number was increased to 12 in August 1964 (Fig. 3).

The CCGS "St. Catharines" is equipped with deck and laboratory facilities required to make oceanographic observations. Oceanographers from the Pacific Oceanographic Group accompany the ship on each patrol. The CCGS "Stonetown" is equipped with bathythermograph sounding equipment, and the BT observations are made by members of the ship's crew.

CRUISE LOG, CCGS "ST. CATHARINES", SURVEY P-64-4

- October 30: ship departed from Esquimalt, B. C. enroute to Ocean Weather Station "P"; 2 oceanographic stations observed along Line "P"; gales forced cancellation of any further observations.
- November 2: relieved CCGS "Stonetown" at Station "P", and commenced the regular on-station program. During this patrol there were days when the winds gusted to 70 knots; the winds were 30 m.p.h. or greater for 30% of the patrol. This stormy weather caused several interruptions in the oceanographic work.
- December 14: relieved by CCGS "Stonetown", and proceeded on return trip to base; 1 oceanographic station observed enroute. Oceanographic work was suspended because of BT winch breakdown and need for full ship's speed to return to base on schedule.
- December 16: berthed at Esquimalt, B. C.

Three oceanographic stations were observed on Line "P", and 14 stations were observed at Station "P" - 1 to 135 m, 7 to 400 m, 4 to 2000 m, and 2 to 4200 m. Dissolved oxygen determinations were made at the 14 stations at Station "P". BT casts to 275 m depth were made at each oceanographic station and twice-daily at 0200 and 1700 hours GMT, weather permitting at Station "P". A few BT casts to 275 m were made along Line "P". At each 0200 cast and along Line "P" a surface seawater sample was collected for salinity analysis. BT casts to 135 m for OCEAN series (Giovando, MS, 1962) were made during 11 days.

Vertical plankton hauls from 150 m were made on 18 days, and one haul was made from 1200 m depth. Surface horizontal tows of 10 minutes duration were made on 10 days at evenly spaced intervals during the survey. Ocean productivity measurements were made on 17 surface samples and on samples at depth collected by Van Dorn sampler casts on 3 days. Thirteen 15-gallon steel drums of seawater were collected at the surface and at several depths to 2500 m for the U. S. Navy Radiological Defence Laboratory, San Francisco, Calif.

CRUISE LOG, CCGS "STONETOWN", PATROL NO. 63

- December 11: departed Esquimalt for Ocean Weather Station "P". The ship returned to base later in the day due to the sudden demise of the bos'n. No BT observations were made on Line "P".
- December 14: relieved CCGS "St. Catharines", and commenced patrol duties.
- January 1: ship returned to base to make emergency repairs to storm-damaged hull plates.
- January 8: resumed patrol duties at Station "P".
- January 25: relieved by CCGS "St. Catharines" and proceeded on return journey to base. No BT observations were made enroute because of rough weather.
- January 28: berthed at Esquimalt, B. C.

BT observations were occasionally interrupted at Station "P" by stormy weather. A modified OCEAN series program was inaugurated on this patrol. A BT cast to 275 m was made every 3 hours; each series commences at 1800 GMT and consists of 8 observations. The data from these 8 BT slides are still used to provide one daily OCEAN message. Seventeen complete series were made. Surface seawater samples for salinity analysis were collected at 0200 GMT on Station. Sixteen 15-gallon steel drums of surface seawater were collected at intervals throughout the patrol for shipment to the U.S. Navy Radiological Defence Laboratory at San Francisco, Calif. A ship's officer supervised the continuous collection of rain water in an apparatus containing an ion exchange column, which was also shipped to the U.S.N.R.D.L.

OBSERVATION PROCEDURES

1. Samples at depth were obtained with Nansen reversing water samplers. Stations to 400 m were observed in one cast, whilst deeper stations were observed in 2 casts - the first to 400 m, and the second from 500 m to the deepest sampler.
2. Seawater temperatures (except 0 m) were measured with paired protected reversing thermometers except at these depths - 20, 30, 75, 125 and 250 m, where only one thermometer was used. Unprotected reversing thermometers were used on all samplers from 300 m to the deepest sampling depth at each station.
3. Surface samples (0 m) for salinity and dissolved oxygen determinations were obtained in a one-gallon plastic bucket. The surface temperature was measured in this sample with an armoured thermometer graduated in 0.5 C° intervals.
4. Water transparency observations were made with a white secchi disc of 30 cm diameter.
5. Station locations were determined by the officers of the watch, who also made the meteorological observations reported with the oceanographic data.

LABORATORY PROCEDURES

The salinity determinations of the oceanographic station samples and the 0200 surface samples collected during Survey P-64-4 were made with an inductive salinometer, Model 601 MK III, manufactured by Auto-Lab Industries Pty. Ltd., Sydney, Australia (Brown and Hamon, 1961). Most of the samples were analysed on board ship. The salinity data are the means of duplicate determinations whose "conductivity ratio" values fell within an acceptable range. The accuracy of the determinations at the 35‰ salinity level is stated to be $\pm .003\%$ (Brown and Hamon, 1961). The 0200 surface samples collected during the "Stonetown" Patrol No. 63 were analysed in the shore laboratory using a similar salinometer.

The dissolved oxygen analyses were done in the shipboard laboratory by a modified Winkler method (Strickland and Parsons, 1960).

The ocean productivity measurements were made according to the methods described by Strickland (1960). Results will be reported later in a publication of the Fisheries Research Board.

SURFACE SALINITY DATA

These are presented in a table listing the date-time, position, and salinity values. The data are considered to have an accuracy of $\pm 0.003\%$ (Brown and Hamon, 1961).

BATHYTHERMOGRAPH DATA

The BT traces have been drawn on standard pre-printed graphs resembling BT calibration grids of several depth ranges. The slides were positioned on the appropriate calibration grid in an adjustable holder. The BT traces were aligned on the grid using a temperature value obtained from a thermograph recording of the engine-room intake temperature, which had been carefully checked with a 3 m reversing thermometer temperature. The top of the trace was always aligned with the zero-depth grid line.

The bathythermograms are arranged in a chronological order on the pages. The date-time (GMT) and position information are recorded below each bathythermogram in the CODC code format. Observations made at an oceanographic station are identified by an asterisk (*) preceding the time-date group. Only one of the 8 slides in each OCEAN series is reproduced as a bathythermogram. This is considered to be representative of the group. The date-time information is for the particular slide, but the position co-ordinates are those of the last slide in the series.

PERSONNEL

The oceanographer on board the CCGS "St. Catharines" during the Survey P-64-4 was Mr. A. R. Stanley-Jones. The ship's master was Captain A. A. R. Dykes. The officers and crews of both weatherships took the BT observations and assisted in the oceanographic station observations. Assisting in the preparation of the data for computation and presentation in the data record were: Messrs. D. G. Robertson, H. J. Hollister, and H. Wilke.

SECTION II

Description of the machine-generated data record

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an "estimate of precision" for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** (σ) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under "GENERAL INFORMATION" in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an "**interpolation error estimate**" derived from the particular interpolation formula used. There are two purposes in stating the error estimates; **first**, to give an indication of the quality of the interpolated data; **second**, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T , S , O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the "measurement error estimate" comprises the "**combined measurement and interpolation error estimate**". It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

IDENT. CODE		LATITUDE (N=+)		LONGITUDE (W=+)		DATE		TIME		DEPTH		VESSEL	
COUNTRY	INST.	DEG.	MIN.	DEG.	MIN.	YEAR	MONTH	DAY	HOURS	MIN.	TO BOTTOM	ENTERED BY	CHECKED BY
1	8					19	20	21	22	23	24		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
10	WATER	11	WAVES I	12	WAVES II	13	WIND	14	BAROMETER	15	AIR TEMP.	16	WET BULB
COLOUR	TRANS.	DW	DW	PW	Hw	DIR.	DIR.	17	W.W. CODE	18	CLOUD TYPE	19	HOURS AFTER H.W.
36	37	38	39	40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59	60	61	62	63
64	65	66	67	68	69	70	71	72	73	74	75	76	77
78	79	80											

OBSERV. CARD		TEMPERATURE		SALINITY		OXYGEN		TOTAL - P		NO ₃ - N		SIO ₃ - SI		P.H.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ_i = Standard deviation of the combined error estimates at standard oceanographic depth,

ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $1/3 (V_{i_1} - V_{i_2})$

γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the **combined measurement and interpolation error estimate**. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the **interpolation error estimate** is given only when $\frac{\sigma}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) ww-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

(1) CRUISE REFERENCE NUMBER:

Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC

(2) CONSECUTIVE NUMBER:

Indicates the chronological order in which the stations were occupied.

(3) LATITUDE:

Indicate the position of the platform at the time of observation

(4) LONGITUDE:

(5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).

(6) YEAR:

(7) MONTH:

(8) DAY:

(9) HOUR:

The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.

(10) COUNTRY/INSTITUTE:

The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.

(11) DEPTH:

The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".

(12) MAXIMUM

SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).

00 m - 50 m = 00
51 m - 150 m = 01
151 m - 250 m = 02
etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: A code based on the percentage of yellow (see table 2 and Note under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;
- NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.
- (16) WAVES 1
($d_w d_w P_w H_w$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_w d_w P_w H_w$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE
(WND-FCE): Beaufort notation (See Table 6).
- WIND SPEED
(WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO ₄	(9) -P-	(10) NO ₂	(11) NO ₃	(12) SiO ₃
				(13) pH.	

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 C1\%$, reported in:
 a. 1/100 parts per 1000, or
 b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places. An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

- (8) PO_4 Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
- (9) -P- Total Phosphorus reported to hundredths of microgram-atoms per litre.
- (10) NO_2 Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
- (11) NO_3 Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
- (12) SiO_2 Silicate-Silicon reported to tenths of microgram-atoms per litre.
- (13) pH The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

- | | | | | | |
|--------------|------------|----------|------------|----------|-----------|
| (1) DEPTH | (2) TEMP | (3) SAL | (4) OXYGEN | (5) SGMT | (6) SOUND |
| (7) DELTA-D. | (8) POT-EN | (9) SVA. | | | |

- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY: A. The reported salinity values are measured to three decimal places.
 (i) the interpolation error estimate is less than twice the standard deviation of measurement
 —the interpolated value is reported to three decimal places (e.g., 30.139).
 (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 —the interpolated value is reported to two decimal places, and followed by the **interpolation error estimate** (e.g., 29.23 C).
 B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 —the interpolated value is reported to two decimal places, and followed by the **combined measurement and interpolation error estimate** (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "Introduction" to section II of the data record).

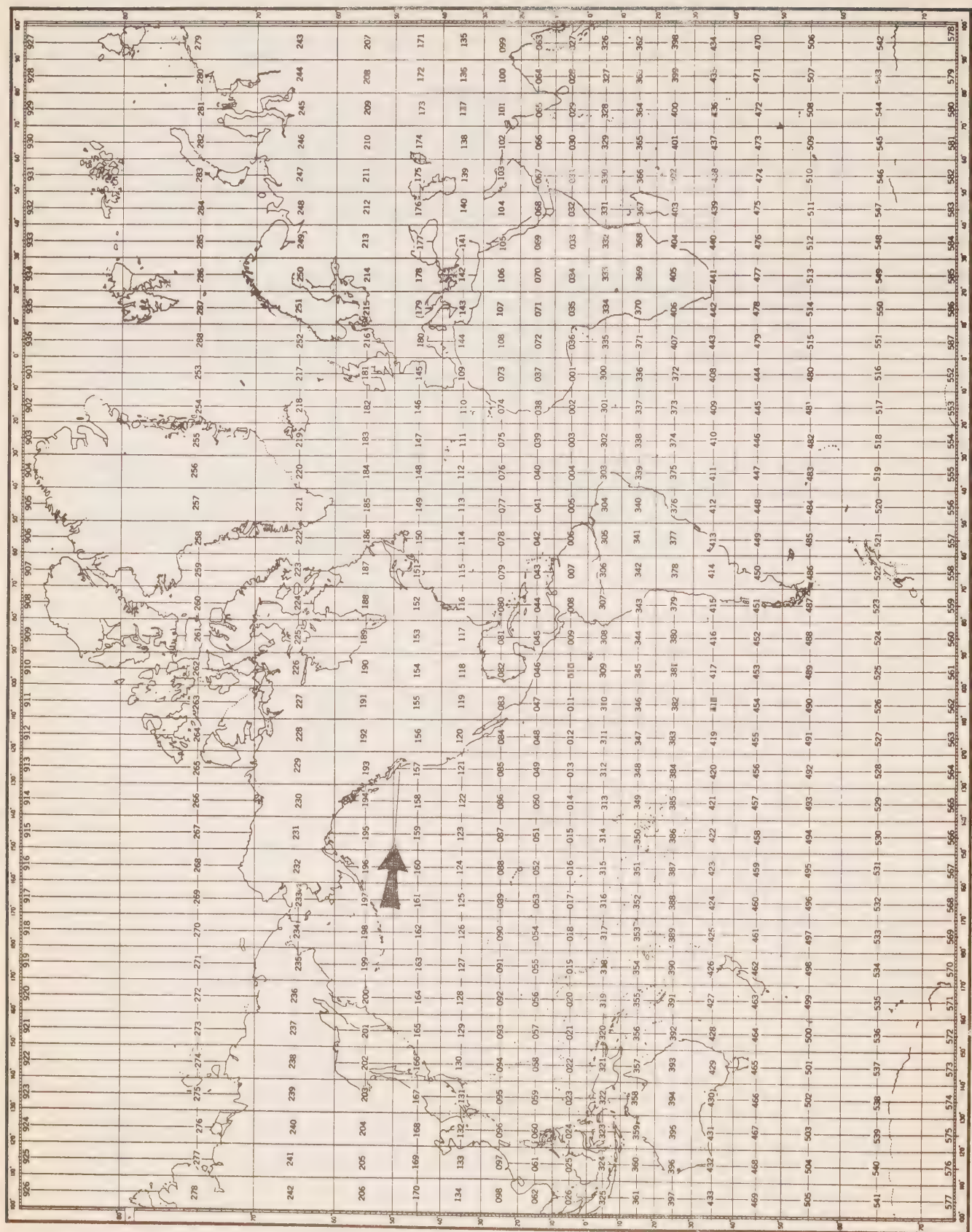
- (5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.
- (6) SOUND VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).
- (7) DELTA-D: The geo-potential anomaly as defined by:
- $$\Delta D = \int_0^P \delta \rho dp$$
- ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).
- (8) POTENTIAL ENERGY ANOMALY: The Potential energy anomaly χ as defined by:
- $$\chi = 1/g \int_0^P p \delta \rho dp = \int_0^Z \rho p \delta dz$$
- χ is expressed in units of 10^5 ergs/cm² and recorded to two decimal places (e.g., 116.44).
- (9) SPECIFIC VOLUME ANOMALY: The specific volume anomaly as defined by:
- $$\delta = \alpha - \alpha_{35.0, P}$$
- δ is expressed in ml/gr, and conventionally reported as $10^5 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

† (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs.

* (Asterisk): this character may occur in the interpolated portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one observed depth interval. The third, and all consequent levels within that interval are preceded by the asterisk to indicate that more than two machine interpolations were carried out, utilizing the same set of interpolation parabolas.

Q appears occasionally in this data record, preceding an observed oxygen value. This "questionable" indicator infers that the value does not fit the usual pattern of oxygen distribution. It could be due to a sampling error and is generally not believed to be a determination methods error.



MARS DEN SQUARE CHART

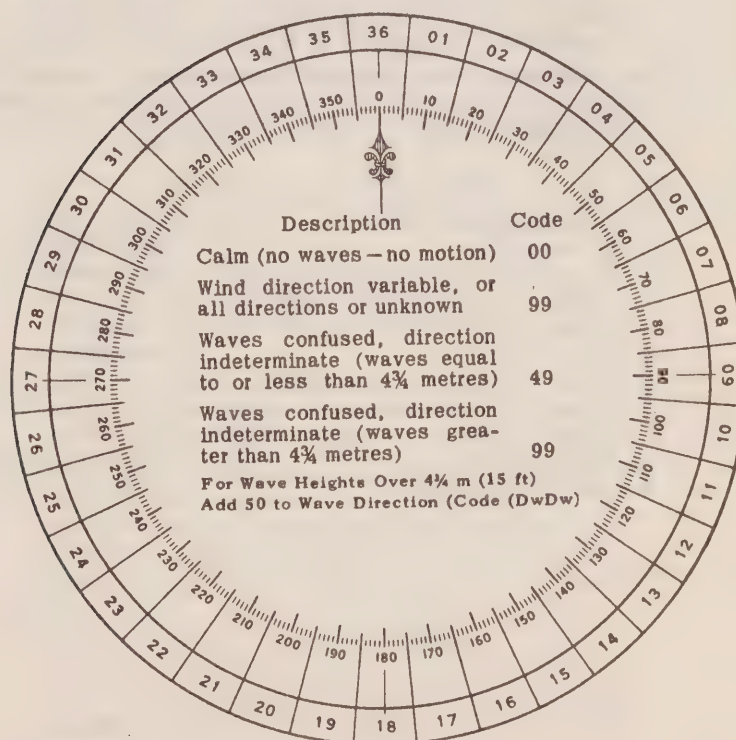
Table 1
CONVERSION
MINUTES TO $\frac{1}{10}$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (P_w)

(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (H_w)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code

0 Less than $\frac{1}{4}$ m (1 ft)
 1 $\frac{1}{2}$ m ($1\frac{1}{2}$ ft)
 2 1 m (3 ft)
 3 $1\frac{1}{2}$ m (5 ft)
 4 2 m ($6\frac{1}{2}$ ft)
 5 $2\frac{1}{2}$ m (8 ft)
 6 3 m ($9\frac{1}{2}$ ft)
 7 $3\frac{1}{2}$ m (11 ft)
 8 4 m (13 ft)
 9 $4\frac{1}{2}$ m (14 ft)
 x Height not determined

Code

0 5 m (16 ft)
 1 $5\frac{1}{2}$ m ($17\frac{1}{2}$ ft)
 2 6 m (19 ft)
 3 $6\frac{1}{2}$ m (21 ft)
 4 7 m ($22\frac{1}{2}$ ft)
 5 $7\frac{1}{2}$ m (24 ft)
 6 8 m ($25\frac{1}{2}$ ft)
 7 $8\frac{1}{2}$ m (27 ft)
 8 9 m (29 ft)
 9 $9\frac{1}{2}$ m ($30\frac{1}{2}$ ft) or more

Add
 50
 to
 Dw Dw

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww			
No meteors except photometeors	00	Cloud development not observed or not observable	characteristic change of the state of sky during the past hour
	01	Clouds generally dissolving or becoming less developed	
	02	State of sky on the whole unchanged	
	03	Clouds generally forming or developing	
Haze, dust, sand or smoke	04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes	
	05	Haze	
	06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
	07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
	08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
	09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
	10	Mist	
	11	Patches of	shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea
	12	More of less continuous	
	13	Lightning visible, no thunder heard	
	14	Precipitation within sight, not reaching the ground or the surface of the sea	
	15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station	
	16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station	
	17	Thunderstorm, but no precepitation at the time of observation	
	18	Squalls	at or within sight of the station during the preceding hour or at the time of observation
	19	Funnel clouds	
ww = 20 - 29			
		Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation	
	20	Drizzle (not freezing) or snow grains	not falling as shower(s)
	21	Rain (not freezing)	
	22	Snow	
	23	Rain and snow or ice pellets, type (a)	
	24	Freezing drizzle or freezing rain	
	25	Shower(s) of rain	
	26	Shower(s) of snow, or of rain and snow	
	27	Shower(s) of hail, or of rain and hail	
	28	Fog or ice fog	
	29	Thunderstorm (with or without precipitation)	
ww = 30 - 39			
		Duststorm, sandstorm, drifting or blowing snow	
	30		- has decreased during the preceding hour
	31	Slight or moderate duststorm or sandstorm	- no appreciable change during the preceding hour
	32		- has begun or has increased during the preceding hour
	33		- has decreased during the preceding hour
	34	Severe duststorm or sandstorm	- no appreciable change during the preceding hour
	35		- has begun or has increased during the preceding hour
	36	Slight or moderate blowing snow	generally low (below eye level)
	37	Heavy drifting snow	
	38	Slight or moderate blowing snow	generally high (above eye level)
	39	Heavy blowing snow	
ww = 40 - 49			
		Fog or ice fog at the time of observation	
	40	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer	
	41	Fog or ice fog in patches	
	42	Fog or ice fog, sky visible	has become thinner during the preceding hour
	43	Fog or ice fog, sky invisible	
	44	Fog or ice fog, sky visible	no appreciable change during the preceding hour
	45	Fog or ice fog, sky invisible	
	46	Fog or ice fog, sky visible	has begun or has become thicker during the preceding hour
	47	Fog or ice fog, sky invisible	
	48	Fog, depositing rime, sky visible	
	49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

- | | | | |
|----|--|---|--------------------------------------|
| 50 | Drizzle, not freezing, intermittent | { | slight at time of observation |
| 51 | Drizzle, not freezing, continuous | | |
| 52 | Drizzle, not freezing, intermittent | { | moderate at time of observation |
| 53 | Drizzle, not freezing, continuous | | |
| 54 | Drizzle, not freezing, intermittent | { | heavy (dense) at time of observation |
| 55 | Drizzle, not freezing, continuous | | |
| 56 | Drizzle, freezing, slight | | |
| 57 | Drizzle, freezing, moderate or heavy (dense) | | |
| 58 | Drizzle and rain, slight | | |
| 59 | Drizzle and rain, moderate or heavy | | |

ww = 60 - 69 Rain

- | | | | |
|----|---|---|---------------------------------|
| 60 | Rain, not freezing, intermittent | { | slight at time of observation |
| 61 | Rain, not freezing, continuous | | |
| 62 | Rain, not freezing, intermittent | { | moderate at time of observation |
| 63 | Rain, not freezing, continuous | | |
| 64 | Rain, not freezing, intermittent | { | heavy at time of observation |
| 65 | Rain, not freezing, continuous | | |
| 66 | Rain, freezing, slight | | |
| 67 | Rain, freezing, moderate or heavy | | |
| 68 | Rain or drizzle and snow, slight | | |
| 69 | Rain or drizzle and snow, moderate or heavy | | |

70 - 79 Solid precipitation not in showers

- | | | | |
|----|---|---|---------------------------------|
| ww | | | |
| 70 | Intermittent fall of snow flakes | { | slight at time of observation |
| 71 | Continuous fall of snow flakes | | |
| 72 | Intermittent fall of snow flakes | { | moderate at time of observation |
| 73 | Continuous fall of snow flakes | | |
| 74 | Intermittent fall of snow flakes | { | heavy at time of observation |
| 75 | Continuous fall of snow flakes | | |
| 76 | Ice prisms (with or without fog) | | |
| 77 | Snow grains (with or without fog) | | |
| 78 | Isolated starlike snow crystals (with or without fog) | | |
| 79 | Ice pellets, type (a) | | |

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

- | | | | |
|----|--|---|---|
| 80 | Rain shower(s), slight | | |
| 81 | Rain shower(s), moderate or heavy | | |
| 82 | Rain shower(s), violent | | |
| 83 | Shower(s) of rain and snow mixed, slight | | |
| 84 | Shower(s) of rain and snow mixed, moderate or heavy | | |
| 85 | Snow shower(s), slight | | |
| 86 | Snow shower(s), moderate or heavy | | |
| 87 | Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed | { | - slight |
| 88 | | | |
| 89 | Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder | { | - slight |
| 90 | | | |
| 91 | Slight rain at time of observation | { | thunderstorm during the preceding hour but not at time of observation |
| 92 | Moderate or heavy rain at time of observation | | |
| 93 | Slight snow, or rain and snow mixed or hail at time of observation | | |
| 94 | Moderate or heavy snow, or rain and snow mixed or hail at time of observation | { | - moderate or heavy |
| 95 | Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation | | |
| 96 | Thunderstorm, slight or moderate, with hail at time of observation | | |
| 97 | Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation | { | thunderstorm at time of observation |
| 98 | Thunderstorm, combined with duststorm or sandstorm at time of observation | | |
| 99 | Thunderstorm, heavy, with hail at time of observation | | |

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, dust storm, sand storm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{1}{2}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N.B.
04. Arctic Biological Station, St. Anne de Bellevue, P.Q.
05. Biological Station, St. John's Nfld.
06. Station de Biologie Marine, Grande Riviere, P.Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N.S.
09. Pacific Naval Laboratory, Esquimalt, B.C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION III

Serial oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Pacific Oceanographic Group Nanaimo, B. C.
<u>Observation Platform:</u>	CCGS "St. Catharines"
<u>Vessel's Cruising Speed:</u>	13 knots
<u>Total Number of Stations Occupied:</u>	17
<u>Anemometer Height Above Sea Level:</u>	19 metres
<u>Water transparency:</u>	Secchi Disc.
<u>Barometer readings:</u>	Aneroid Barometer (corrected)
<u>Air temperature:</u>	Sling Psychrometer
<u>Wet bulb temperature:</u>	Sling Psychrometer
<u>Surface sea water temperature:</u>	Bucket sample (deck thermometer)
<u>Depth to bottom:</u>	U. S. Coast and Geodetic Survey Chart 8500

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature	0.02
Salinity	0.003
Oxygen	0.03

C-REF-NO 010 YR 1964 DEPTH 133 WAVES 1 12XX AIR T 10.5 VIS 7
 CONS. NO 001 MONTH 10 MXSAMPD 01 WAVES 2 276X WET B 09.4 STN 001
 LAT 48-33 N DAY 31 NO.DPTH 8 WND-DIR 120 WW-CODE 02
 LON 125-33 W HR 01.2 W-COLOR WND-SPD 05 CLD-TPE 6
 MARSD SQ 157 C/I 1802 W-TRNSP BARO 1018.0 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
012	0000	100 B	31932		2458	14865
012	0010	0944 B	32022		2474	14847
012	0020	0867 B	32523		2525	14826
012	0030	0814 B	32871		2560	14812
012	0050	0792	33101		2582	14810
012	0075	0748 B	33433		2614	14801
012	0100	0717 C	33645		2635	14796
012	0110	0708 B	33684		2639	14794

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1000 B	31932		2458	14865	0000	00000	3365
0010	0944 B	32022		2474	14847	0033	00002	3213
0020	0867 B	32523		2525	14826	0063	00006	2729
0030	0814 B	32871		2560	14812	0089	00013	2396
0050	0792	33101		2582	14810	0135	00031	2197
0075	0748 B	33433		2614	14801	0186	00064	1894
0100	0717 C	33645		2635	14796	0232	00104	1698

C-REF-NO 010 YR 1964 DEPTH 128 WAVES 1 99XX AIR T 09.9 VIS 7
 CONS. NO 002 MONTH 10 MXSAMPD 01 WAVES 2 276X WET B 08.8 STN 002
 LAT 48-38 N DAY 31 NO.0PTH 6 WND-DIR 120 WW-CODE 02
 LON 126-00 W HR 03.2 W-COLOR WND-SPD 05 CLD-TPE 6
 MARSD SQ 157 C/I 1802 W-TRNSP BARO 1018.0 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
032	0000	101 B	32304		2485	14873
032	0010	0993 B	32302		2488	14868
032	0020	0967 B	32396		2500	14862
032	0050	0758	33307		2603	14799
032	0075	0705 B	33701		2641	14788
032	0100	0697 B	33751		2646	14789

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1010 B	32304		2485	14873	0000	00000	3105
0010	0993 B	32302		2488	14868	0031	00002	3082
0020	0967 B	32396		2500	14862	0062	00006	2973
0030	0899 G	3267 I		2532	14842	0090	00013	2666
0050	0758	33307		2603	14799	0137	00032	1997
0075	0705 B	33701		2641	14788	0183	00061	1637
0100	0697 B	33751		2646	14789	0223	00097	1593

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 2821	AIR T 08.8	VIS 7
CONS. NO 003	MONTH 11	MXSAMPD 20	WAVES 2 2635	WET B 07.7	STN
LAT 50-00 N	DAY 07	NO.DPTH 21	WND-DIR 280	WW-CODE 02	
LON 144-59 W	HR 18.7	W-COLOR 10	WND-SPD 07	CLD-TPE 8	
MARSD SQ 195	C/I 1802	W-TRNSP 18	BARO 1018.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
187	0000	083 B	32657	681	2541	14810
187	0010	0836	32656	676	2540	14814
187	0020	0836 B	32655	677 B	2540	14816
187	0030	0836 B	32657	681	2540	14817
187	0050	0835 B	32653	684	2540	14820
187	0075	0826 B	32659	683	2542	14821
187	0100	0484 B	32862	712	2602	14691
187	0130	0418 B	33188	597	2635	14673
187	0155	0362 B	33548	456	2669	14658
187	0180	0350 B	33663	382	2680	14659
187	0205	0344 B	33708	322	2684	14661
187	0255	0340 B	33811	205	2692	14669
187	0305	0350	33902	130	2699	14683
187	0405	0360	34038	Q 148 B	2708	14705
194	0500	0355 D	34143	080 B	2717	14720
194	0600	0346 B	34213	074 B	2724	14734
194	0800	0315	34326	060 B	2736	14756
194	1000	0282	34389	065	2744	14776
194	1200	0254	34464	060	2752	14798
194	1500	0226	34520	067 B	2759	14837
194	2000	0191 B	34592	138	2767	14908

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0830 B	32657	681	2541	14810	0000	00000	2573
0010	0836	32656	676	2540	14814	0026	00001	2584
0020	0836 B	32655	677 B	2540	14816	0052	00005	2586
0030	0836 B	32657	681	2540	14817	0078	00012	2586
0050	0835 B	32653	684	2540	14820	0130	00033	2591
0075	0826 B	32659	683	2542	14821	0195	00075	2578
0100	0484 B	32862	712	2602	14691	0253	00126	2003
0125	0416 E	33127	624	2630	14671	0300	00180	1737
0150	0371 B	33348 C	483	2663	14661	0340	00235	1428
0175	0350 B	3365 B	394	2679	14658	0374	00292	1281
0200	0345 B	33702	333	2683	14661	0406	00353	1241
0225	0341 B	33749	272	2687	14664	0436	00420	1204
0250	0340 B	33801	216	2691	14668	0466	00493	1165
0300	0349	33894	135	2698	14681	0524	00655	1108
0400	0360	34032	Q 146 B	2708	14704	0631	01039	1022

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0355 D	34143	080 B	2717	14720	0730	01496	0942
0600	0346 B	34213	074 B	2724	14734	0823	02017	0888
0700	0332 B	34275	066 B	2730	14745	0910	02597	0834
0800	0315	34326	060 B	2736	14756	0992	03228	0785
1000	0282	34389	065	2744	14776	1144	04627	0716
1200	0254	34464	060	2752	14798	1281	06177	0641
1500	0226	34520	067 B	2759	14837	1467	08756	0584
2000	0191 B	34592	138	2767	14908	1746	13731	0512

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 2722	AIR T	VIS 7
CONS. NO 004	MONTH 11	MXSAMPD 04	WAVES 2 2935	WET B	STN
LAT 50-03 N	DAY 10	NO.DPTH 15	WND-DIR 270	WW-CODE 02	
LON 144-56 W	HR 19.7	W-COLOR	WND-SPD 06	CLD-TPE 8	
MARSD SQ 195	C/I 1802	W-TRNSP	BARO 1006.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
197	0000	079 B	32663	692 B	2548	14795
197	0003	0789 C	32662		2548	14795
197	0010	0787	32661	685	2548	14795
197	0020	0787 B	32663	688	2548	14797
197	0029	0786 B	32665	689	2548	14798
197	0049	0788 B	32663	689	2548	14802
197	0074	0755 B	32680	694	2554	14794
197	0098	0478	32865	703 B	2603	14689
197	0123	0412 B	33095	611 B	2628	14668
197	0148	0348 B	33533	441 B	2669	14651
197	0172	0334 B	33619	378 B	2678	14650
197	0197	0336	33682	323 B	2682	14656
197	0246	0336 B	33775	232 B	2690	14665
197	0295	0352 C	33878	162 B	2696	14682
197	0394	0363	34031	101	2708	14705

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0790 B	32663	692 B	2548	14795	0000	00000	2513
0010	0787	32661	685	2548	14795	0025	00001	2512
0020	0787 B	32663	688	2548	14797	0051	00005	2512
0030	0786 B	32665	689	2548	14798	0076	00012	2511
0050	0790 B	32662	689	2548	14803	0126	00032	2521
0075	0744 B	32686	695	2556	14790	0189	00072	2444
0100	0469 B	32879	699 B	2605	14685	0245	00122	1974
0125	0406 B	3313 B	597 B	2632	14666	0291	00175	1722
0150	0346 B	3355 B	434 B	2671	14651	0330	00229	1355
0175	0334 B	33628	371 B	2678	14651	0363	00284	1285
0200	0336	33688	317 B	2683	14657	0395	00345	1243
0225	0335	33737	268 B	2687	14661	0426	00413	1207
0250	0337 B	33784	225 B	2690	14667	0456	00486	1176
0300	0347 C	3388 B	158 B	2697	14680	0514	00649	1116
0400	0364	34040	100	2708	14706	0622	01034	1021

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 2324	AIR T 08.8	VIS 5
CONS. NO 005	MONTH 11	MXSAMPD 01	WAVES 2 2326	WET B 08.8	STN
LAT 49-52 N	DAY 13	NO.DPTH 10	WNC-DIR 230	WW-CODE 21	
LON 144-56 W	HR 19.2	W-COLOR 00	WNC-SPD 13	CLD-TPE 7	
MARSD SQ 159	C/I 1802	W-TRNSP 16	BARO 1006.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
192	0000	078 B	32680	694	2550	14791
192	0008	0760	32668	694	2552	14785
192	0016	0759 B	32675	694	2553	14786
192	0024	0758 B	32677	693 B	2553	14787
192	0041	0762 B	32680	697 B	2553	14791
192	0059	0758 B	32668	696	2553	14792
192	0080	0756	32682	697	2554	14795
192	0099	0491 B	32803	694 B	2597	14693
192	0117	0444 B	32974	671 B	2615	14679
192	0135	0381 B	33295	531 B	2647	14660

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0780 B	32680	694	2550	14791	0000	00000	2487
0010	0759	32669	694	2553	14785	0025	00001	2468
0020	0758 B	32676	693	2553	14786	0050	00005	2463
0030	0759 B	32679	694 B	2553	14788	0075	00011	2464
0050	0760 B	32674	697	2553	14792	0124	00032	2472
0075	0770 E	32672	697	2551	14800	0187	00072	2491
0100	0486 B	32810	695 B	2598	14692	0244	00122	2045
0125	0384 H	3311 B	608 C	2632	14657	0291	00176	1716

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 3033	AIR T	VIS 7
CONS. NO 006	MONTH 11	MXSAMPD 20	WAVES 2 2767	WET B	STN
LAT 50-05 N	DAY 19	NO.DPTH 22	WND-DIR 300	WW-CODE 02	
LON 144-56 W	HR 20.0	W-COLOR 20	WND-SPD 12	CLD-TPE 8	
MARSD SQ 195	C/I 1802	W-TRNSP 16	BARO 1013.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
200	0000	075 B	32642	694 F	2552	14779
200	0003	0758				
200	0010	0760	32655	694	2551	14785
200	0020	0760 B	32659	690	2552	14787
200	0029	0760 B	32658	697	2552	14788
200	0049	0762	32661	696	2552	14792
200	0074	0757 B	32663	696	2552	14794
200	0098	0470	32879	702 B	2605	14685
200	0123	0419 B	33104	623 B	2628	14671
200	0147	0374 B	33381	509 B	2655	14660
200	0172	0347 B	33620	403 B	2676	14656
200	0197	0337 B	33673	342 B	2682	14656
200	0246	0335 B	33768	224 B	2689	14665
200	0296	0346 B	33875	139	2697	14679
200	0396	0358	34016	088 B	2707	14703
208	0500	0353	34133	078 B	2717	14719
208	0600	0346	34210	075 B	2723	14734
208	0800	0320	34212	068	2726	14756
208	1000	0282	34392	063	2744	14776
208	1200	0256	34456	053	2751	14799
208	1500	0225 B	34518	069 B	2759	14837
208	2000	0193 B	34588	139	2767	14908

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0750 B	32642	694 F	2552	14779	0000	00000	2475
0010	0760	32655	694	2551	14785	0025	00001	2480
0020	0760 B	32659	690	2552	14787	0050	00005	2478
0030	0760 B	32658	697	2552	14788	0075	00012	2480
0050	0765	32659	696	2551	14793	0125	00032	2489
0075	0745 C	32670	697	2555	14790	0187	00072	2458
0100	0461 B	32896	698 B	2607	14682	0243	00121	1954
0125	0415 B	33127	614 B	2631	14670	0289	00174	1735
0150	0370 B	33416	495 B	2658	14659	0329	00231	1476
0175	0345 B	33631	394 B	2677	14656	0364	00289	1293
0200	0336 B	33679	334 B	2682	14657	0396	00350	1250
0225	0334 B	33727	272 B	2686	14660	0427	00418	1213
0250	0336 B	33777	216 B	2690	14666	0458	00491	1179
0300	0347 B	33882	135	2697	14680	0515	00654	1115

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0358	34021	087 B	2707	14703	0624	01041	1029
0500	0353	34133	078 B	2717	14719	0723	01500	0948
0600	0346	34210	075 B	2723	14734	0816	02024	0890
0700	0335	3421 E	071 B	2725	14746	0906	02623	0884
0800	0320	34212	068	2726	14756	0995	03309	0875
1000	0282	34392	063	2744	14776	1156	04781	0714
1200	0256	34456	053	2751	14799	1294	06338	0649
1500	0225 B	34518	069 B	2759	14837	1481	08933	0584
2000	0193 B	34588	139	2767	14909	1761	13938	0517

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 3622	AIR T 05.5	VIS 7
CONS. NO 007	MONTH 11	MXSAMPD 42	WAVES 2 2923	WET B 03.8	STN
LAT 50-00 N	DAY 21	NO.DPTH 26	WND-DIR 360	WW-CODE 02	
LON 144-56 W	HR 18.8	W-COLOR 10	WND-SPD 06	CLD-TPE 8	
MARSD SQ 195	C/I 1802	W-TRNSP 23	BARO 1020.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
188	0000	073 B	32670	708	2557	14772
188	0010	0732	32668	696 B	2556	14774
188	0020	0732 B	32668	696	2556	14776
188	0030	0732 B	32668	702	2556	14777
188	0049	0732	32671	702	2556	14781
188	0074	0702 B	32696	706 B	2563	14773
188	0099	0445 B	32868	722 B	2607	14675
188	0124	0403 B	33239	575 B	2641	14666
188	0148	0358 B	33526	455 B	2668	14655
188	0173	0338 B	33655	372 B	2680	14653
188	0198	0340 B	33700	324	2683	14658
188	0247	0336 B	33786	220 B	2691	14666
188	0297	0350 C	33901	137 B	2698	14681
188	0396	0360	34043	Q 077 B	2709	14704
188	0495	0354	34146	087	2718	14719
200	0600	0344	34208	079 B	2723	14733
200	0800	0314	34321	061	2735	14755
200	1000	0284	34401	066	2744	14777
200	1200	0255	34454	063	2751	14798
200	1500	0224	34525	076 B	2759	14836
200	2000	0193 B	34573	128	2766	14908
200	2500	0170 B	34627	198	2772	14985
200	3000	0158	34659	269	2775	15066
200	3500	0154 C	34674	294	2777	15152
200	4000	0151	34685	326	2778	15239
200	4200	0152	34685	312	2778	15275

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0730 B	32670	708	2557	14772	0000	00000	2427
0010	0732	32668	696 B	2556	14774	0024	00001	2433
0020	0732 B	32668	696	2556	14776	0049	00005	2434
0030	0732 B	32668	702	2556	14777	0073	00011	2436
0050	0733	32670	702	2556	14781	0122	00031	2438
0075	0692 B	32700	708 B	2564	14769	0183	00070	2366
0100	0441 B	32882	717 B	2608	14674	0237	00118	1944
0125	0401 B	33253	569 B	2642	14666	0282	00169	1627
0150	0355 B	33541	447 B	2669	14655	0320	00222	1368
0175	0338 B	33660	368 B	2680	14653	0353	00277	1264

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0200	0340 B	33703	320	2684	14658	0385	00338	1235
0225	0337 B	33746	266	2687	14662	0415	00405	1202
0250	0337 B	33793	214 B	2691	14667	0445	00478	1168
0300	0351 C	33906	134 B	2699	14682	0502	00639	1100
0400	0360	34048 Q	077 B	2709	14705	0609	01020	1011
0500	0354	34150	087	2718	14720	0707	01472	0936
0600	0344	34208	079 B	2723	14733	0799	01992	0890
0700	0330	34267	069 B	2729	14745	0887	02575	0838
0800	0314	34321	061	2735	14755	0969	03208	0788
1000	0284	34401	066	2744	14777	1120	04602	0709
1200	0255	34454	063	2751	14798	1258	06155	0650
1500	0224	34525	076 B	2759	14836	1445	08736	0578
2000	0193 B	34573	128	2766	14908	1726	13774	0528
2500	0170 B	34627	198	2772	14985	1982	19689	0478
3000	0158	34659	269	2775	15066	2220	26436	0454
3500	0154 C	34674	294	2777	15152	2451	34235	0452
4000	0151	34685	326	2778	15239	2684	43260	0454

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 3034	AIR T 05.5	VIS 7
CONS. NO 008	MONTH 11	MXSAMPD 04	WAVES 2 3235	WET B 03.8	STN
LAT 49-58 N	DAY 24	NO. OPTH 15	WNC-DIR 300	WW-CODE 02	
LON 145-04 W	HR 19.9	W-COLOR 10	WND-SPD 15	CLD-TPE 8	
MARSD SQ 159	C/I 1802	W-TRNSP 16	BARO 1016.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
199	0000	068 B	32673	713	2564	14752
199	0003	0680				
199	0010	0679	32688	703	2565	14753
199	0020	0679 B	32686	703	2565	14755
199	0030	0678 B	32683	706 B	2565	14756
199	0050	0681	32684	705 B	2564	14761
199	0075	0669 B	32704	705 B	2568	14760
199	0100	0432	33056	642 B	2623	14672
199	0125	0401 B	33467	515 B	2659	14669
199	0150	0374 B	33640	419 B	2675	14664
199	0175	0355 B	33691	353 B	2681	14661
199	0200	0348 B	33734	291 B	2685	14662
199	0250	0341 B	33818	215	2693	14669
199	0300	0347 C	33901	136 B	2699	14681
199	0400	0359	34034	097 B	2708	14704

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0680 B	32673	713	2564	14752	0000	00000	2361
0010	0679	32688	703	2565	14753	0024	00001	2350
0020	0679 B	32686	703	2565	14755	0047	00005	2353
0030	0678 B	32683	706 B	2565	14756	0071	00011	2355
0050	0681	32684	705 B	2564	14761	0119	00030	2361
0075	0669 B	32704	705 B	2568	14760	0178	00068	2334
0100	0432	33056	642 B	2623	14672	0230	00114	1804
0125	0401 B	33467	515 B	2659	14669	0271	00161	1466
0150	0374 B	33640	419 B	2675	14664	0306	00210	1312
0175	0355 B	33691	353 B	2681	14661	0338	00264	1257
0200	0348 B	33734	291 B	2685	14662	0369	00324	1220
0225	0343 B	33776	249 B	2689	14665	0400	00390	1185
0250	0341 B	33818	215	2693	14669	0429	00462	1153
0300	0347 C	33901	136 B	2699	14681	0486	00622	1100
0400	0359	34034	097 B	2708	14704	0593	01005	1020

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 3424	AIR T 04.4	VIS 7
CONS. NO 009	MONTH 11	MXSAMPD 20	WAVES 2 3427	WET B 03.3	STN
LAT 50-04 N	DAY 26	NO.DPTH 21	WND-DIR 340	WW-CODE 02	
LON 144-54 W	HR 18.9	W-COLOR 10	WND-SPD 12	CLD-TPE 8	
MARSD SQ 195	C/I 1802	W-TRNSP 17	BAKD 1016.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
189	0000	070 B	32695	711	2563	14760
189	0010	0690	32687	701	2563	14758
189	0020	0690 B	32684	701	2563	14759
189	0030	0689 B	32686	708 B	2563	14761
189	0050	0682	32694	705 B	2565	14761
189	0075	0674 B	32709	706 B	2567	14762
189	0100	0440 B	32972	683 B	2616	14675
189	0125	0387 B	33339	535 B	2650	14661
189	0150	0358 B	33607	428 B	2674	14657
189	0175	0345 B	33663	375 B	2680	14656
189	0200	0342 B	33705	322 B	2684	14659
189	0250	0342 B	33806	227 B	2692	14669
189	0300	0347 B	33891	148 B	2698	14681
189	0400	0359 B	34039	086 B	2709	14704
205	0495	0354	34126	069	2716	14719
205	0595	0346	34216	Q 101	2724	14733
205	0794	0315	34332	065	2736	14755
205	0993	0286	34398	064 B	2744	14776
205	1191	0258	34457	062	2751	14798
205	1489	0229 B	34519	065	2758	14837
205	1986	0194 B	34594	134	2767	14907

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0700 B	32695	711	2563	14760	0000	00000	2370
0010	0690	32687	701	2563	14758	0024	00001	2365
0020	0690 B	32684	701	2563	14759	0048	00005	2368
0030	0689 B	32686	708 B	2563	14761	0071	00011	2367
0050	0682	32694	705 B	2565	14761	0119	00030	2354
0075	0674 B	32709	706 B	2567	14762	0178	00068	2336
0100	0440 B	32972	683 B	2616	14675	0231	00115	1875
0125	0387 B	33339	535 B	2650	14661	0274	00164	1549
0150	0358 B	33607	428 B	2674	14657	0310	00215	1321
0175	0345 B	33663	375 B	2680	14656	0343	00269	1269
0200	0342 B	33705	322 B	2684	14659	0374	00330	1236
0225	0341 B	33755	273 B	2688	14664	0405	00397	1199
0250	0342 B	33806	227 B	2692	14669	0435	00470	1163
0300	0347 B	33891	148 B	2698	14680	0492	00631	1108
0400	0359 B	34039	086 B	2709	14704	0599	01014	1016

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0354	34131	070	2716	14720	0699	01471	0950
0600	0345	34220	Q 101	2724	14734	0791	01993	0882
0700	0331	34286	088 B	2731	14745	0878	02568	0825
0800	0314	34334	065	2736	14755	0959	03192	0778
1000	0285	34400	064 B	2744	14777	1109	04581	0711
1200	0257	34459	062	2751	14799	1247	06133	0648
1500	0226 B	34525	070 B	2759	14837	1434	08716	0580
2000	0193 B	34595	137	2767	14909	1711	13680	0512

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 1224	AIR T	VIS 5
CONS. NO 010	MONTH 11	MXSAMPD 04	WAVES 2 1225	WET B	STN
LAT 50-01 N	DAY 28	NO.DPTH 15	WND-DIR 120	WW-CODE 21	
LON 144-59 W	HR 18.9	W-COLOR 10	WND-SPD 12	CLO-TPE 5	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 999.0	CLO-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
189	0000	065 B	32689	712	2569	14740
189	0003	0653				
189	0010	0655	32694	714 B	2569	14744
189	0020	0654 B	32699	705 B	2569	14745
189	0030	0656 B	32695	714 B	2569	14748
189	0050	0657 B	32691	704 B	2568	14751
189	0075	0653 B	32691	699	2569	14754
189	0100	0420 B	32907	697	2613	14665
189	0125	0401 B	33109	606	2631	14664
189	0150	0366 B	33625	423	2675	14660
189	0175	0355 B	33631	346 B	2676	14660
189	0200	0342	33741	299	2686	14660
189	0250	0344 B	33838	204 B	2694	14670
189	0300	0348 B	33907	141	2699	14681
189	0400	0359 B	34059	088	2710	14704

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0650 B	32689	712	2569	14740	0000	00000	2312
0010	0655	32694	714 B	2569	14744	0023	00001	2316
0020	0654 B	32699	705 B	2569	14745	0047	00005	2312
0030	0656 B	32695	714 B	2569	14748	0070	00011	2319
0050	0657 B	32691	704 B	2568	14751	0117	00030	2325
0075	0653 B	32691	699	2569	14754	0175	00067	2323
0100	0420 B	32907	697	2613	14665	0228	00115	1904
0125	0401 B	33109	606	2631	14664	0274	00167	1735
0150	0366 B	33625	423	2675	14660	0313	00221	1315
0175	0355 B	33631	346 B	2676	14660	0346	00276	1302
0200	0342	33741	299	2686	14660	0377	00336	1209
0225	0341 B	3380 B	250	2691	14664	0407	00402	1164
0250	0344 B	33838	204 B	2694	14670	0436	00472	1141
0300	0348 B	33907	141	2699	14681	0493	00632	1097
0400	0359 B	34059	088	2710	14704	0598	01010	1001

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 99XX	AIR T 07.7	VIS 4
CONS. NO 011	MONTH 11	MXSAMPD 04	WAVES 2 0338	WET B 07.2	STN
LAT 50-01 N	DAY 30	NO.DPTH 15	WND-DIR 180	WW-CODE 45	
LON 144-57 W	HR 18.8	W-COLOR 20	WND-SPD 03	CLD-TPE X	
MARSD SQ 195	C/I 1802	W-TRNSP 17	BARO 986.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
188	0000	068 B	32676	708	2564	14752
188	0003	0662				
188	0010	0663	32680	710	2566	14747
188	0020	0661 B	32681	708	2567	14748
188	0030	0660 B	32686	711	2567	14749
188	0050	0655 B	32706	711 B	2570	14751
188	0075	0513 B	32816	717	2595	14699
188	0100	0416	32935	697 B	2615	14664
188	0125	0386 B	33276	554	2645	14660
188	0150	0377 B	33619	441 B	2673	14665
188	0175	0360 B	33691	362 B	2681	14663
188	0200	0356 B	33730	313	2684	14666
188	0250	0341 B	33806	220 B	2692	14669
188	0300	0347 B	33909	136 B	2699	14681
188	0400	0360	34044	098 B	2709	14705

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0680 B	32676	708	2564	14752	0000	00000	2359
0010	0663	32680	710	2566	14747	0024	00001	2336
0020	0661 B	32681	708	2567	14748	0047	00005	2334
0030	0660 B	32686	711	2567	14749	0071	00011	2330
0050	0655 B	32706	711 B	2570	14751	0117	00030	2312
0075	0513 B	32816	717	2595	14699	0172	00065	2067
0100	0416	32935	697 B	2615	14664	0222	00109	1879
0125	0386 B	33276	554	2645	14660	0266	00159	1595
0150	0377 B	33619	441 B	2673	14665	0303	00211	1330
0175	0360 B	33691	362 B	2681	14663	0335	00265	1262
0200	0356 B	33730	313	2684	14666	0367	00326	1230
0225	0348 B	33766	266	2688	14667	0397	00392	1197
0250	0341 B	33806	220 B	2692	14669	0427	00465	1162
0300	0347 B	33909	136 B	2699	14681	0484	00625	1094
0400	0360	34044	098 B	2709	14705	0590	01006	1014

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 1623	AIR T 05.5	VIS 6
CONS. NO 012	MONTH 12	MXSAMPD 04	WAVES 2 1625	WET B 04.4	STN
LAT 50-06 N	DAY 02	NO.DPTH 14	WND-DIR 160	WW-CODE 03	
LON 144-56 W	HR 18.6	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARSD SQ 195	C/I 1802	W-TRNSP	BARO 1006.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
186	0000	065 B	32690	705	2569	14740
186	0010	0650	32692	705	2569	14742
186	0019	0651 B	32690	702	2569	14744
186	0029	0650 B	32690	706	2569	14745
186	0048	0652	32688	708	2568	14749
186	0072	0647 B	32693	708	2570	14751
186	0096	0416 B	32912	700	2613	14663
186	0120	0377 B	33264	551	2645	14655
186	0144	0360 D	33566	439 B	2671	14656
186	0168	0363 B	33669	389 B	2679	14663
186	0191	0356	33694 Q	356	2681	14664
186	0239	0343 B	33790	245	2690	14667
186	0287	0346 C	33887	146	2698	14678
186	0386	0359 B	34030	096	2708	14702

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0650 B	32690	705	2569	14740	0000	00000	2311
0010	0650	32692	705	2569	14742	0023	00001	2311
0020	0651 B	32690	702	2569	14744	0047	00005	2315
0030	0650 B	32690	706	2569	14745	0070	00011	2315
0050	0656 B	32684	708	2568	14751	0117	00030	2329
0075	0619 D	32711	711	2574	14740	0174	00067	2267
0100	0402 C	3297 B	679 B	2619	14658	0226	00113	1841
0125	0372 B	3334 B	524	2652	14655	0269	00161	1535
0150	0360 C	3361 B	423 B	2674	14658	0305	00212	1325
0175	0361 B	33680	379 B	2680	14663	0337	00266	1272
0200	0353	33710 Q	337	2683	14664	0369	00327	1243
0225	0346 B	33759	280	2688	14666	0400	00394	1201
0250	0343 B	33813	220	2692	14669	0430	00467	1159
0300	0343 B	33904	139 B	2699	14679	0486	00627	1094

C-REF-NO 010 YR 1964 DEPTH C 4206 WAVES 1 1823 AIR T 07.7 VIS 6
 CONS. NO 013 MONTH 12 MXSAMPD 20 WAVES 2 2725 WET B 07.2 STN
 LAT 49-58 N DAY 04 NO.DPTH 21 WND-DIR 170 WW-CODE 02
 LON 145-02 W HR 18.7 W-COLOR 10 WND-SPD 06 CLD-TPE 7
 MARSD SQ 159 C/I 1802 W-TRNSP 18 BARO 993.0 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
187	0000	064 B	32696	705 B	2571	14736
187	0010	0632	32693	708 B	2571	14735
187	0020	0632 B	32693	717	2571	14736
187	0030	0631 B	32693	722	2572	14738
187	0049	0632 B	32695	715	2572	14741
187	0074	0624 B	32706	721 B	2573	14742
187	0099	0424 B	32912	695	2613	14667
187	0123	0382 B	33373	518 B	2653	14659
187	0148	0375 D	33631	435 B	2675	14664
187	0173	0359 B	33678	374 B	2680	14662
187	0198	0356 C	33722	328 B	2684	14665
187	0248	0351 B	33803	236 B	2691	14672
187	0298	0349 C	33896	152 B	2698	14681
187	0398	0358	34043	088	2709	14703
192	0500	0354	34150	090 B	2718	14720
192	0600	0342	34214	085	2724	14732
192	0800	0310	34328	065	2736	14753
192	1000	0282	34390	061 B	2744	14776
192	1200	0254	34451	062	2751	14798
192	1500	0226	34512	071	2758	14837
192	2000	0192	34583	140	2767	14908

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0640 B	32696	705 B	2571	14736	0000	00000	2295
0010	0632	32693	708 B	2571	14735	0023	00001	2288
0020	0632 B	32693	717	2571	14736	0046	00005	2290
0030	0631 B	32693	722	2572	14738	0069	00011	2290
0050	0634 B	32693	715	2571	14742	0115	00030	2295
0075	0616 B	32710	722 B	2575	14739	0173	00066	2265
0100	0420 B	32931	688	2614	14666	0225	00113	1886
0125	0381 B	33402	509 B	2656	14659	0267	00161	1496
0150	0374 D	33639	429 B	2675	14664	0303	00211	1312
0175	0359 B	33682	370 B	2680	14662	0335	00265	1267
0200	0356 C	33725	324 B	2684	14666	0367	00326	1234
0225	0353 B	33766	278 B	2687	14669	0398	00392	1203
0250	0351 B	33807	232 B	2691	14673	0428	00465	1171
0300	0349 C	33899	150 B	2698	14682	0485	00627	1104
0400	0358	34046	088	2709	14704	0592	01008	1011

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0354	34150	090 B	2718	14720	0690	01461	0936
0600	0342	34214	085	2724	14732	0782	01979	0883
0700	0326	34275	075	2730	14743	0868	02556	0828
0800	0310	34328	065	2736	14753	0949	03181	0778
1000	0282	34390	061 B	2744	14776	1101	04574	0715
1200	0254	34451	062	2751	14798	1239	06135	0651
1500	0226	34512	071	2758	14837	1428	08746	0590
2000	0192	34583	140	2767	14908	1709	13785	0519

C-REF-NO 010 YR 1964 DEPTH C 4206 WAVES 1 2823 AIR T 03.3 VIS 7
 CONS. NO 014 MONTH 12 MXSAMPD 04 WAVES 2 3025 WET B 02.7 STN
 LAT 50-06 N DAY 09 NO.CPTH 15 WND-DIR 280 WW-CODE 18
 LON 145-00 W HR 18.8 W-COLOR 30 WND-SPD 12 CLD-TPE 8
 MARSD SQ 195 C/I 1802 W-TRNSP 16 BARO 1015.0 CLD-AMT 5 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
188	0000	060 B	32704	715	2576	14720
188	0003	0614				
188	0009	0615 B	32696	710	2574	14728
188	0018	0616 B	32690	706	2573	14730
188	0027	0615 B	32693	711 B	2574	14731
188	0045	0612 C	32708	715 B	2575	14733
188	0067	0602 B	32723	715 B	2578	14732
188	0090	0454 B	32871	710	2606	14677
188	0113	0397 B	33166	596 B	2635	14661
188	0135	0370	33551	465 B	2669	14659
188	0158	0353 B	33642	398 B	2678	14656
188	0180	0345 B	33679	365 B	2681	14657
188	0225	0351 B	33773	263 B	2688	14668
188	0271	0352 C	33854	182	2695	14677
188	0367	0356	33980	106	2704	14697

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0600 B	32704	715	2576	14720	0000	00000	2241
0010	0615 B	32695	709	2574	14728	0023	00001	2267
0020	0616 B	32690	707	2573	14730	0046	00005	2272
0030	0615 B	32695	712 B	2574	14731	0068	00011	2268
0050	0616 C	3271 B	715 B	2575	14735	0114	00029	2264
0075	0553 E	32758	720 B	2586	14714	0170	00065	2155
0100	0422 B	32983	669 B	2618	14667	0220	00109	1848
0125	0380	3339 E	522 B	2655	14659	0262	00158	1505
0150	0358	3363 C	415 B	2676	14657	0298	00207	1303
0175	0346 B	33672	372 B	2681	14657	0330	00261	1262
0200	0346 B	33720	321 B	2684	14661	0361	00321	1228
0225	0351 B	33773	263 B	2688	14668	0392	00388	1195
0250	0352 B	33819	216	2692	14673	0422	00461	1163
0300	0355 B	33899	148 B	2698	14684	0479	00622	1110

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 2822	AIR T 04.4	VIS 7
CONS. NO 015	MONTH 12	MXSAMPD 05	WAVES 2 3025	WET B 03.3	STN
LAT 49-58 N	DAY 12	NO.DPTH 16	WND-DIR 280	WV-CODE 02	
LON 145-31 W	HR 18.8	W-COLOR 30	WND-SPD 08	CLD-TPE 8	
MARSD SQ 159	C/I 1802	W-TRNSP 17	BARO 1028.0	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
188	0000	059 B	32722	728	2579	14717
188	0003	0584				
188	0010	0582	32721	719	2580	14715
188	0020	0583 B	32724	718	2580	14717
188	0030	0581 B	32727	724	2580	14718
188	0050	0582 B	32723	721 B	2580	14722
188	0075	0582 B	32726	722	2580	14726
188	0100	0574 B	32748	718	2583	14727
188	0125	0401 B	33029	644 B	2624	14663
188	0150	0361 C	33498	461 B	2665	14656
188	0175	0334 B	33645	368	2680	14651
188	0200	0342 B	33720	322 B	2685	14660
188	0250	0339 B	33796	228 B	2691	14668
188	0300	0348 C	33905	127 B	2699	14681
188	0400	0358 B		087		
188	0500	0350	34144	078	2718	14718

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0590 B	32722	728	2579	14717	0000	00000	2216
0010	0582	32721	719	2580	14715	0022	00001	2209
0020	0583 B	32724	718	2580	14717	0044	00005	2209
0030	0581 B	32727	724	2580	14718	0067	00010	2205
0050	0582 B	32723	721 B	2580	14722	0111	00029	2211
0075	0582 B	32726	722	2580	14726	0167	00064	2212
0100	0574 B	32748	718	2583	14727	0222	00114	2189
0125	0401 B	33029	644 B	2624	14663	0272	00171	1795
0150	0361 C	33498	461 B	2665	14656	0313	00227	1406
0175	0334 B	33645	368	2680	14651	0346	00283	1272
0200	0342 B	33720	322 B	2685	14660	0378	00344	1225
0225	0341 B	3376 B	276 B	2688	14664	0408	00410	1194
0250	0339 B	33796	228 B	2691	14668	0438	00483	1168
0300	0348 C	33905	127 B	2699	14681	0495	00644	1098
0400	0358 B	3403 D	087	2708	14704	0602	01027	1023
0500	0350	34144	078	2718	14718	0701	01482	0936

C-REF-NO 010	YR 1964	DEPTH C 4206	WAVES 1 99XX	AIR T 03.3	VIS 6
CONS. NO 016	MONTH 12	MXSAMPD 42	WAVES 2 3324	WET B 01.6	STN
LAT 50-01 N	DAY 13	NO.DPTH 27	WND-DIR 990	WW-CODE 02	
LON 144-52 W	HR 18.8	W-COLOR 30	WND-SPD	CLD-TPE 6	
MARSD SQ 195	C/I 1802	W-TRNSP 27	BARO 1026.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
188	0000	060 B	32716	715 B	2577	14721
188	0003	0605				
188	0010	0604	32718	712	2577	14724
188	0020	0603 B	32722	706	2577	14725
188	0030	0602 B	32722	718	2577	14726
188	0050	0603 C	32727	715 B	2578	14730
188	0075	0602 B	32713	720 B	2577	14734
188	0100	0486	32833	702	2600	14692
188	0125	0411 B	33301	560 B	2645	14671
188	0150	0381	33589	464 B	2671	14666
188	0175	0366 B	33650	395 B	2677	14665
188	0200	0358 B	33703	347	2682	14666
188	0250	0346 B	33807	228 B	2691	14671
188	0300	0350	33879	162 B	2697	14682
188	0400	0360	34032	106 B	2708	14704
188	0500	0355	34133	072 B	2716	14720
200	0601	0339 B	34208		2724	14731
200	0802	0310	34320	070 B	2736	14754
200	1002	0285 B	34400	060	2744	14777
200	1203	0259	34449	066 B	2750	14801
200	1503	0227	34518	071 B	2759	14838
200	2004	0194	34588	126	2767	14910
200	2505	0172	34630	197	2772	14986
200	3006	0160 B	34658	271	2775	15068
200	3507	0156 B	34668	298	2776	15154
200	4009	0152	34680	319	2777	15241
200	4209	0153	34682	312 B	2777	15277

*DEPTH OF BOTTOM OBSERVATION GREATER THAN SOUNDING

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0600 B	32716	715 B	2577	14721	0000	00000	2232
0010	0604	32718	712	2577	14724	0022	00001	2236
0020	0603 B	32722	706	2577	14725	0045	00005	2233
0030	0602 B	32722	718	2577	14726	0067	00010	2233
0050	0603 C	32727	715 B	2578	14730	0112	00029	2233
0075	0602 B	32713	720 B	2577	14734	0169	00065	2245
0100	0486	32833	702	2600	14692	0223	00113	2027
0125	0411 B	33301	560 B	2645	14671	0268	00165	1601

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT. EN	SVA
0150	0381	33589	464 B	2671	14666	0305	00217	1357
0175	0366 B	33650	395 B	2677	14665	0339	00273	1298
0200	0358 B	33703	347	2682	14666	0371	00335	1253
0225	0351 B	33757	286 B	2687	14668	0402	00402	1207
0250	0346 B	33807	228 B	2691	14671	0432	00475	1166
0300	0350	33879	162 B	2697	14682	0490	00638	1120
0400	0360	34032	106 B	2708	14704	0598	01024	1023
0500	0355	34133	072 B	2716	14720	0697	01482	0950
0600	0339 B	34207	064 C	2724	14731	0790	02005	0885
0700	0324 B	34268	063 C	2730	14742	0877	02583	0831
0800	0310	34319	070 B	2735	14753	0958	03213	0785
1000	0285 B	34399	060	2744	14777	1110	04608	0712
1200	0259	34448	066 B	2750	14800	1249	06175	0659
1500	0227	34517	071 B	2759	14838	1438	08795	0587
2000	0194	34588	125	2767	14909	1719	13820	0519
2500	0172	34630	196	2772	14986	1973	19694	0479
3000	0160 B	34658	270	2775	15067	2212	26476	0458
3500	0156 B	34668	298	2776	15153	2447	34374	0460
4000	0152	34680	319	2777	15239	2682	43524	0459

C-REF-NO 010	YR 1964	DEPTH C 3913	WAVES 1 28XX	AIR T	VIS
CONS. NO 017	MONTH 12	MXSAMPD 04	WAVES 2 28XX	WET B	STN 012
LAT 49-49 N	DAY 15	NO.DPTH 15	WND-DIR 280	WW-CODE 02	
LON 142-40 W	HR 02.0	W-COLOR	WND-SPD 10	CLD-TPE 8	
MARSD SQ 159	C/I 1802	W-TRNSP 14	BARO 1028.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
020	0000	068 B	32683		2564	14752
020	0003	0684				
020	0010	0684	32690		2564	14755
020	0020	0684 B	32702		2565	14757
020	0030	0683 B	32685		2564	14758
020	0050	0684 C	32684		2564	14762
020	0075	0683 B	32694		2565	14766
020	0100	0620	32748		2577	14745
020	0125	0472 B	32932		2609	14691
020	0150	0418	33432		2654	14680
020	0175	0383 B	33629		2674	14672
020	0200	0377 B	33696		2680	14674
020	0250	0373 B	33788		2687	14682
020	0300	0372	33851		2692	14691
020	0400	0378	34017		2705	14712

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0680 B	32683		2564	14752	0000	00000	2354
0010	0684	32690		2564	14755	0024	00001	2355
0020	0684 B	32702		2565	14757	0047	00005	2347
0030	0683 B	32685		2564	14758	0071	00011	2360
0050	0684 C	32684		2564	14762	0119	00030	2364
0075	0683 B	32694		2565	14766	0178	00069	2359
0100	0620	32748		2577	14745	0236	00120	2243
0125	0472 B	32932		2609	14691	0289	00181	1940
0150	0418	33432		2654	14680	0332	00241	1511
0175	0383 B	33629		2674	14672	0368	00301	1331
0200	0377 B	33696		2680	14674	0401	00364	1276
0225	0374 B	33747		2684	14678	0432	00433	1237
0250	0373 B	33788		2687	14682	0463	00508	1207
0300	0372	33851		2692	14691	0523	00676	1163
0400	0378	34017		2705	14712	0635	01075	1052

SECTION IV

Bathythermograms

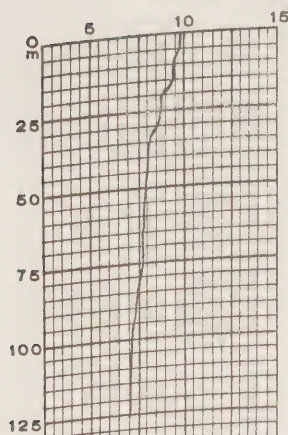
CCGS "ST. CATHARINES"

Daily bathythermograms

and

OCEAN series bathythermograms

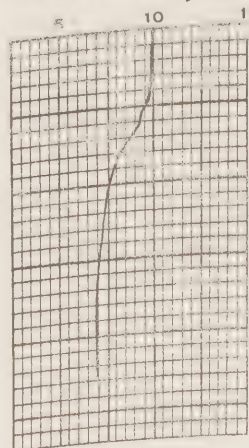
C.C.G.S. "St. Catharines", Survey P-64-4



*64-10-31-00.9

48°33'n

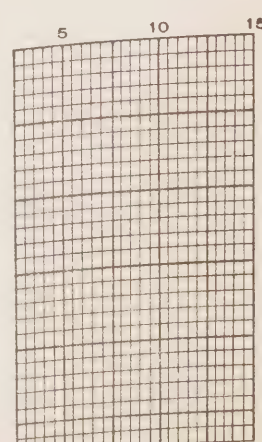
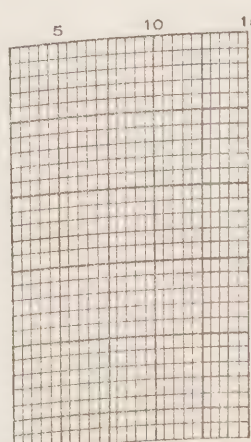
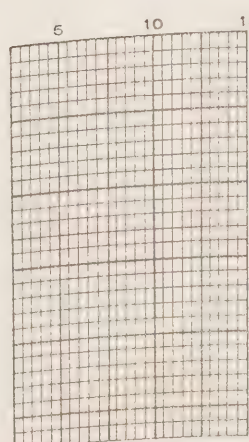
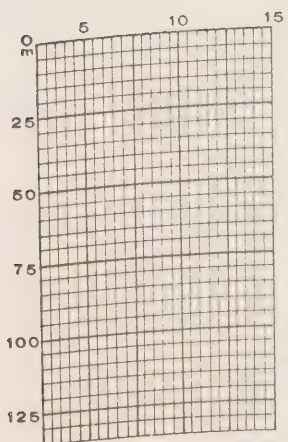
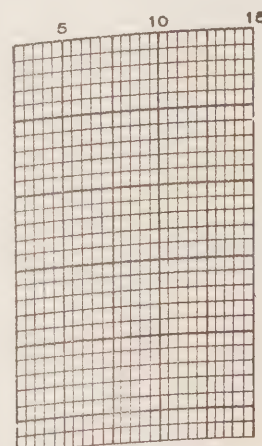
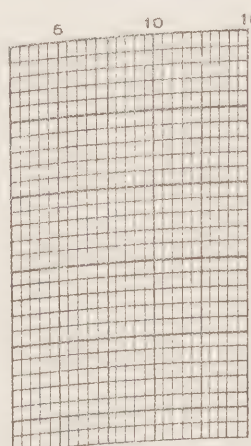
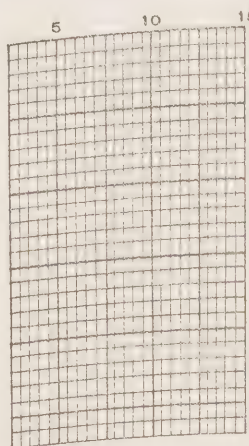
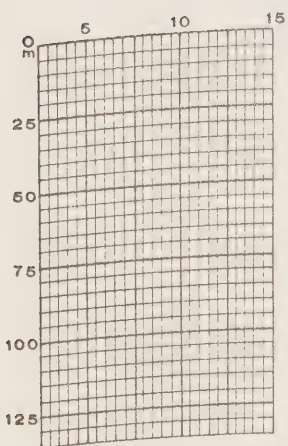
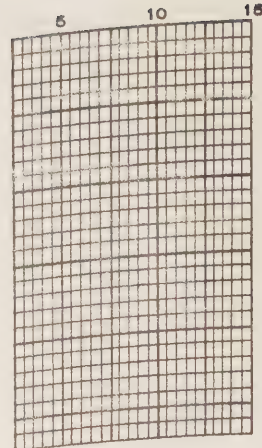
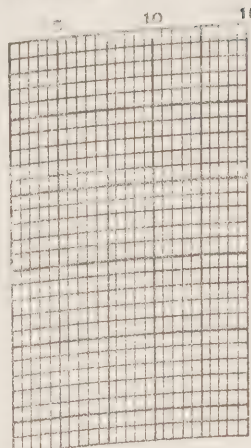
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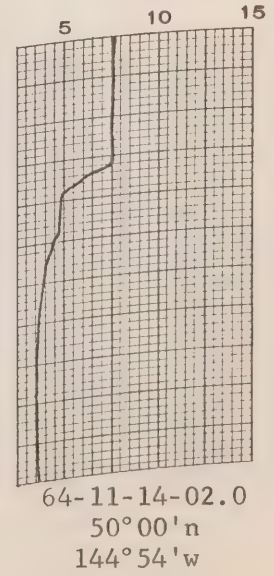
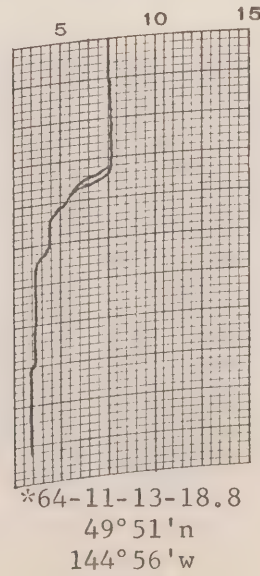
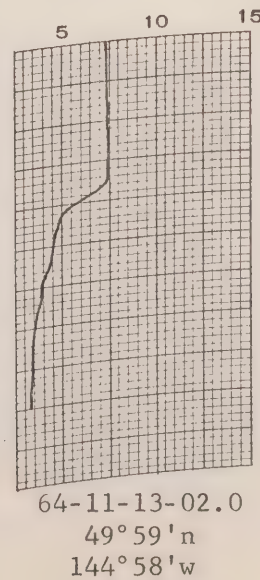
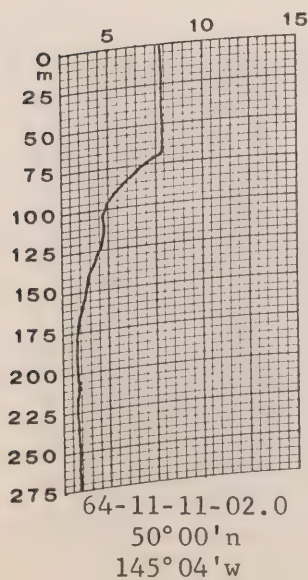
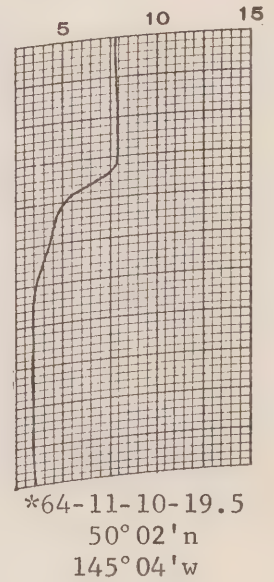
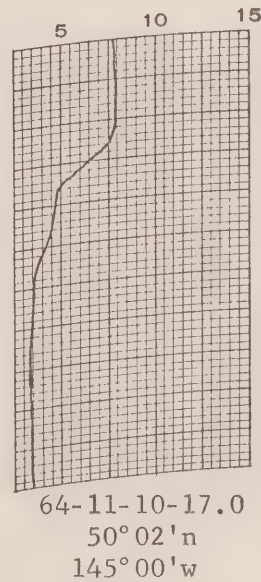
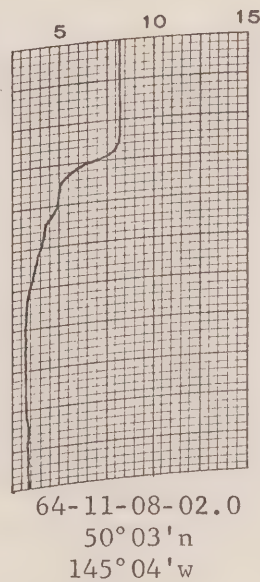
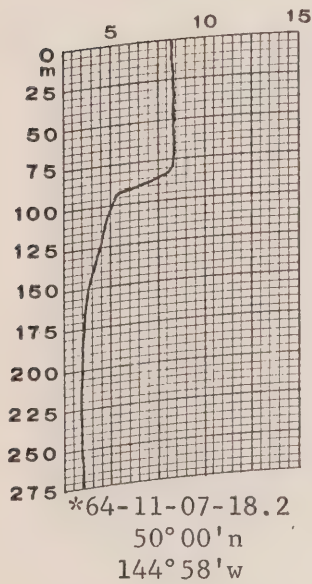
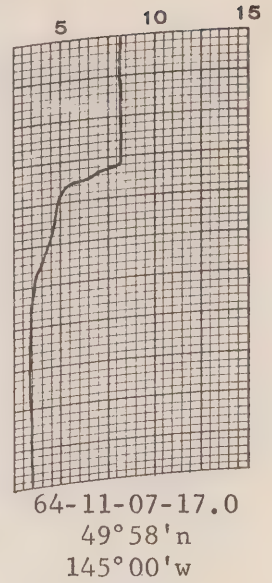
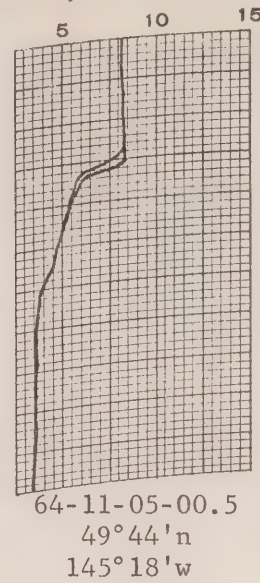
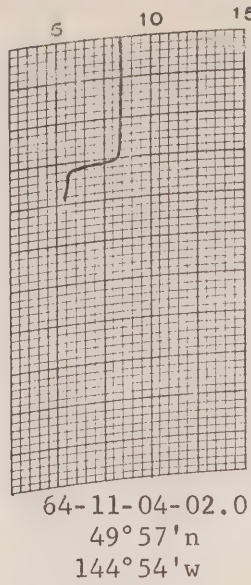
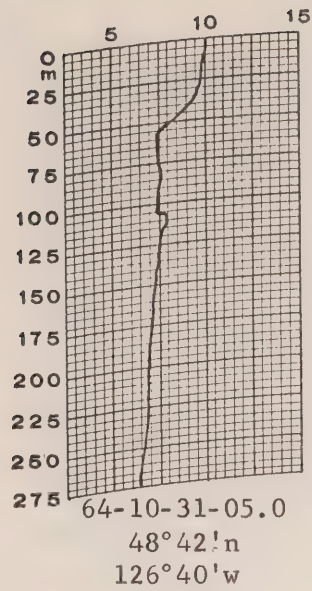
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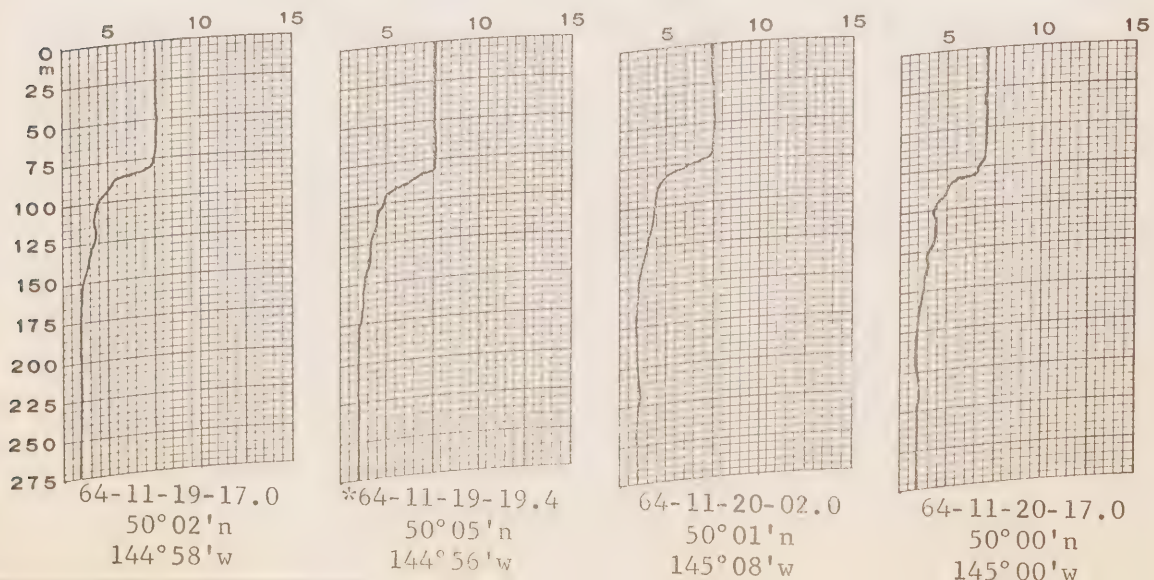
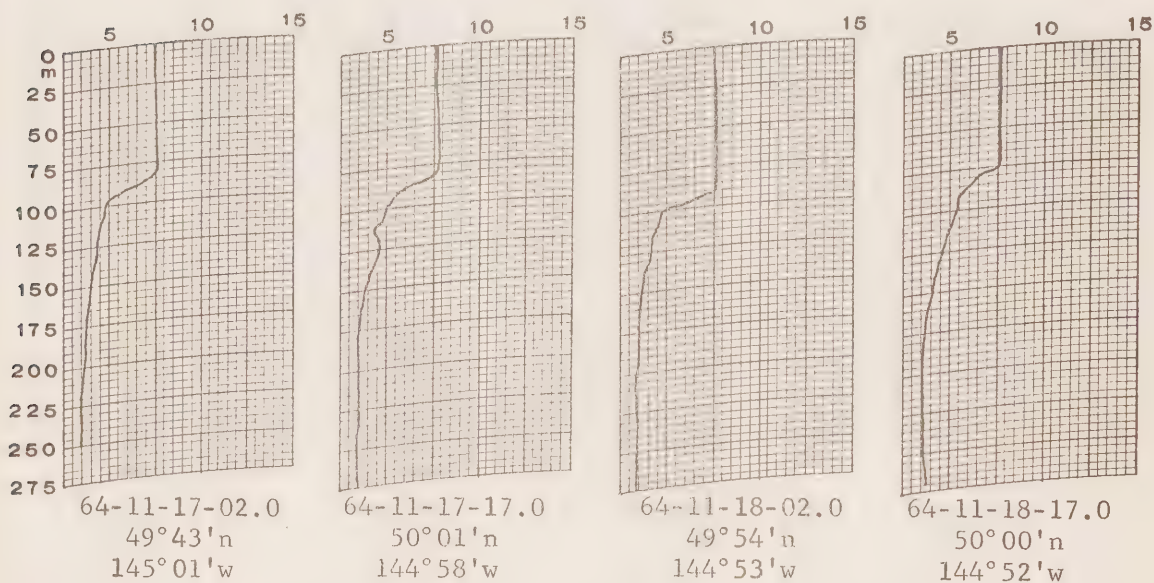
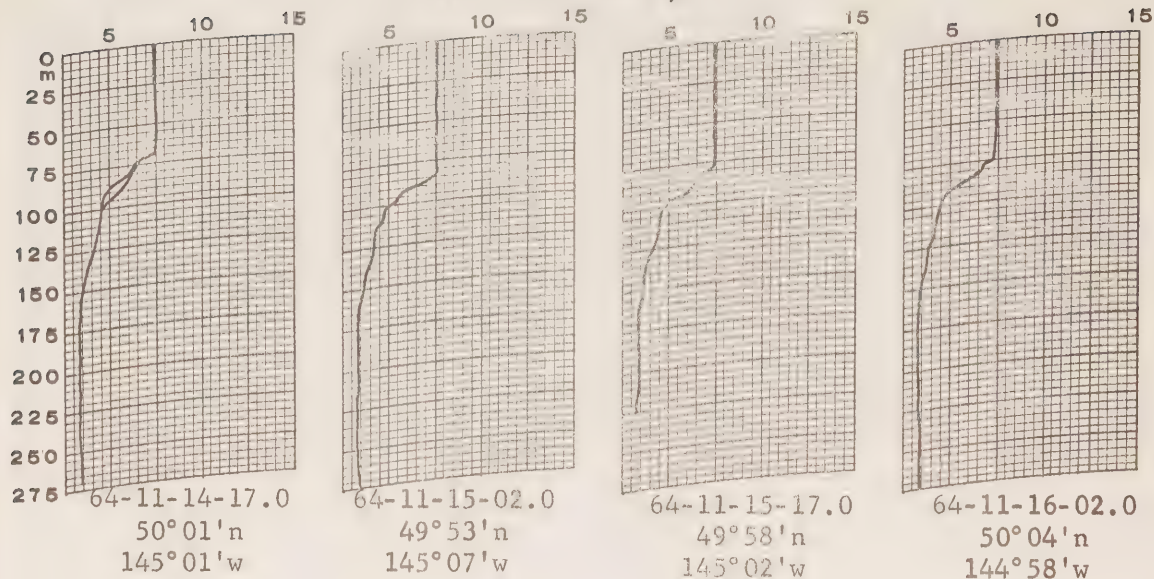
126°00'w



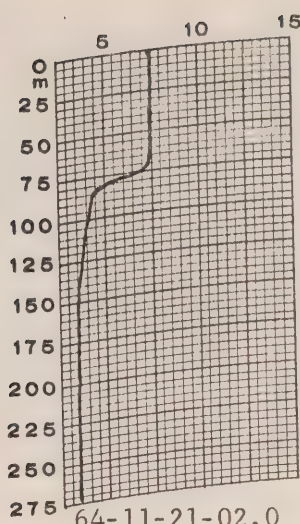
C.C.G.S. "St. Catharines", Survey P-64-4



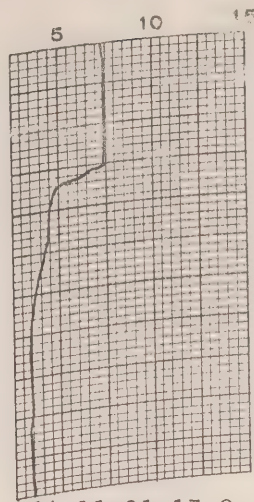
C.C.G.S. "St. Catharines", Survey P-64-4



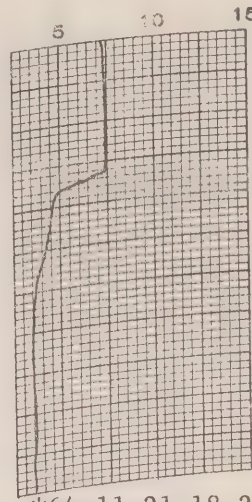
C.C.G.S. "St. Catharines", Survey P-64-4



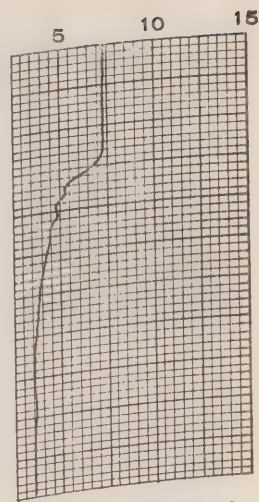
64-11-21-02.0
50°00'n
145°05'w



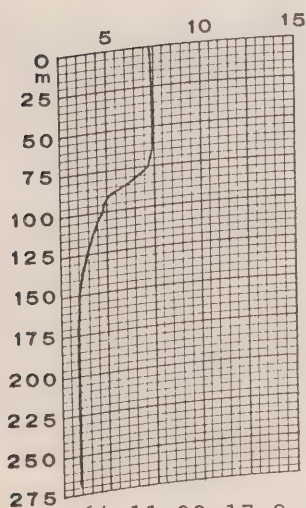
64-11-21-17.0
50°01'n
144°58'w



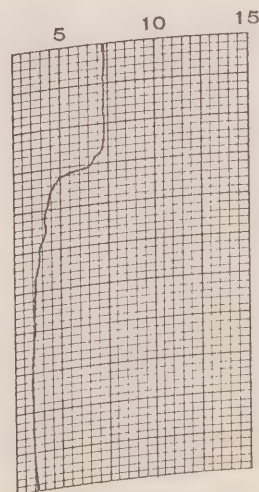
*64-11-21-18.2
50°00'n
144°55'w



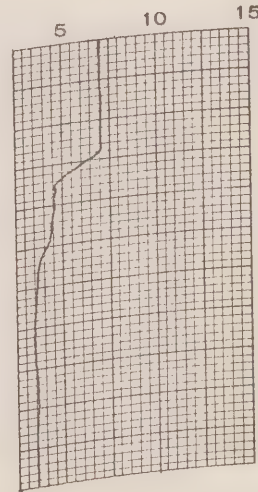
64-11-22-02.0
49°57'n
144°57'w



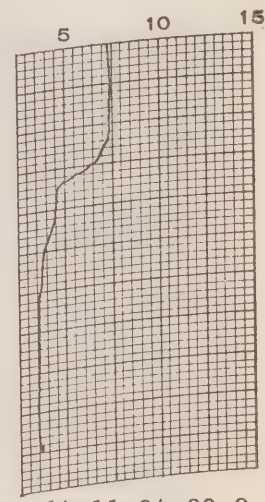
64-11-22-17.0
50°01'n
145°04'w



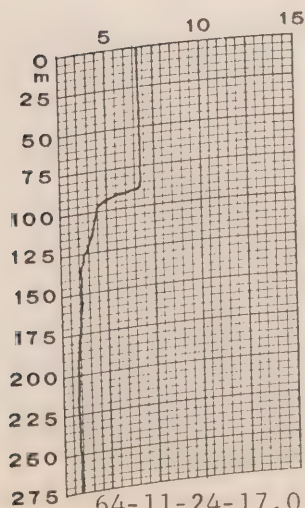
64-11-23-02.0
50°04'n
145°06'w



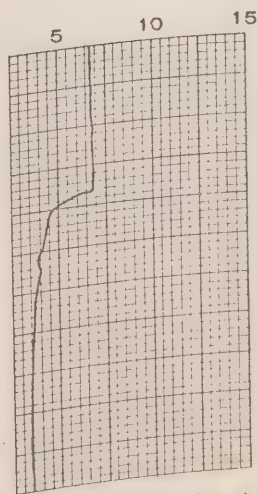
64-11-23-17.0
50°00'n
145°02'w



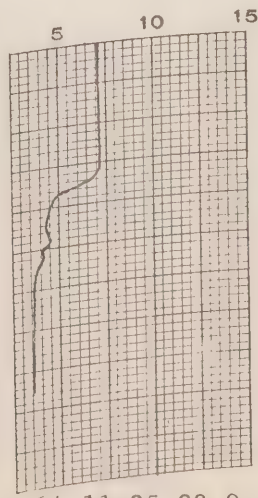
64-11-24-02.0
50°04'n
145°05'w



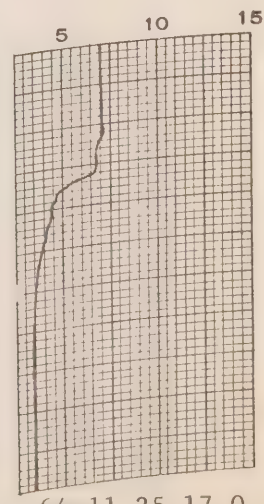
64-11-24-17.0
50°03'n
145°04'w



*64-11-24-19.4
49°58'n
145°04'w

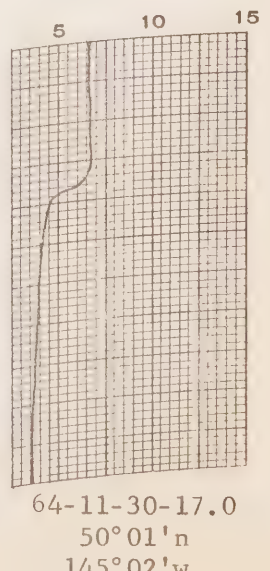
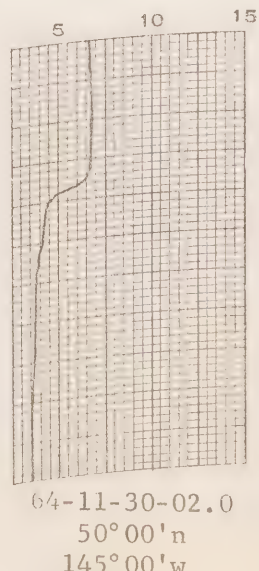
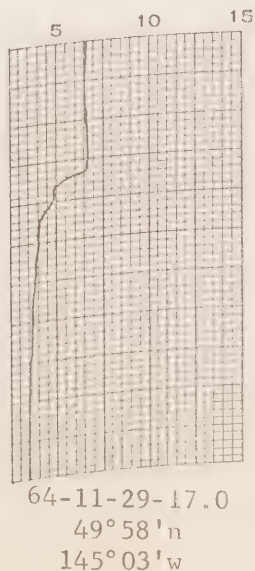
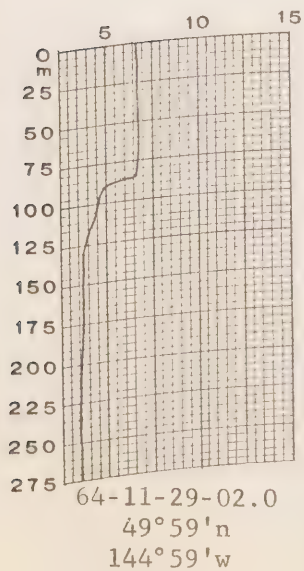
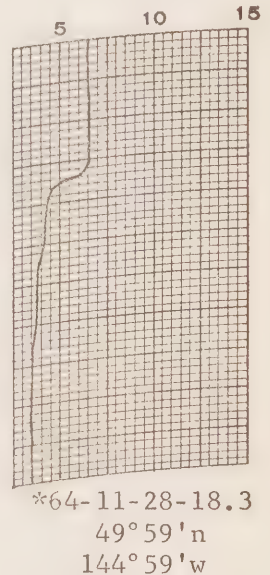
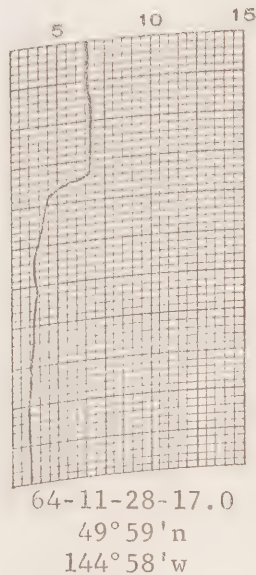
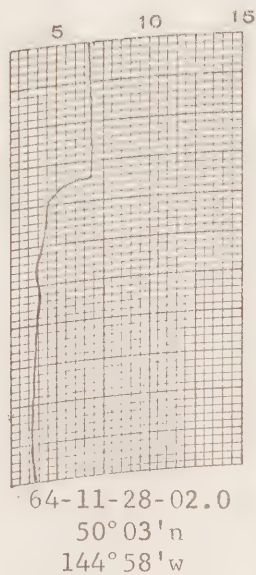
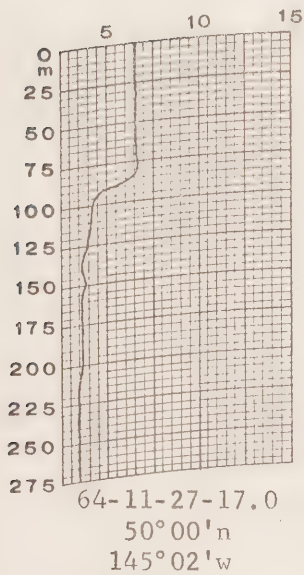
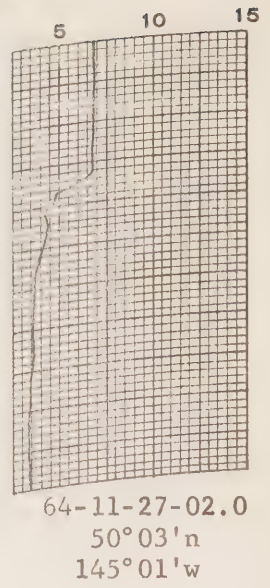
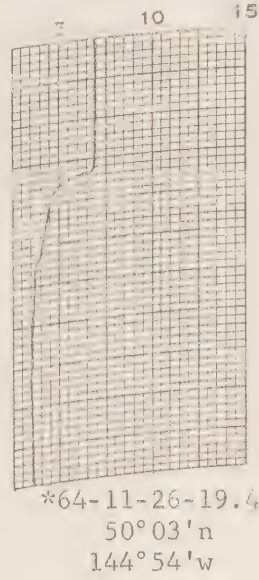
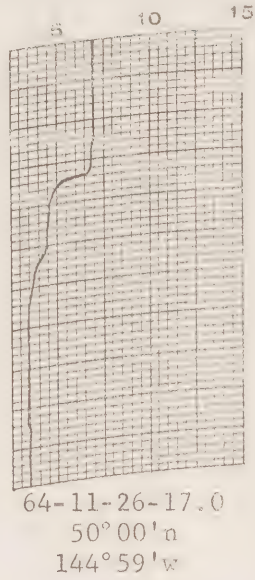
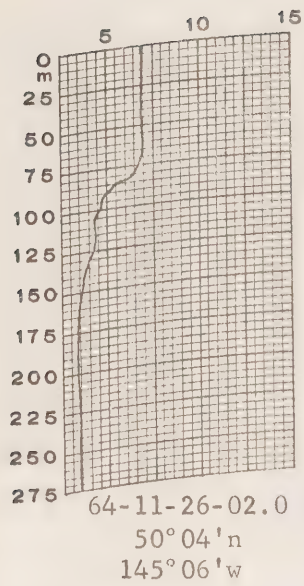


64-11-25-02.0
50°04'n
145°05'w

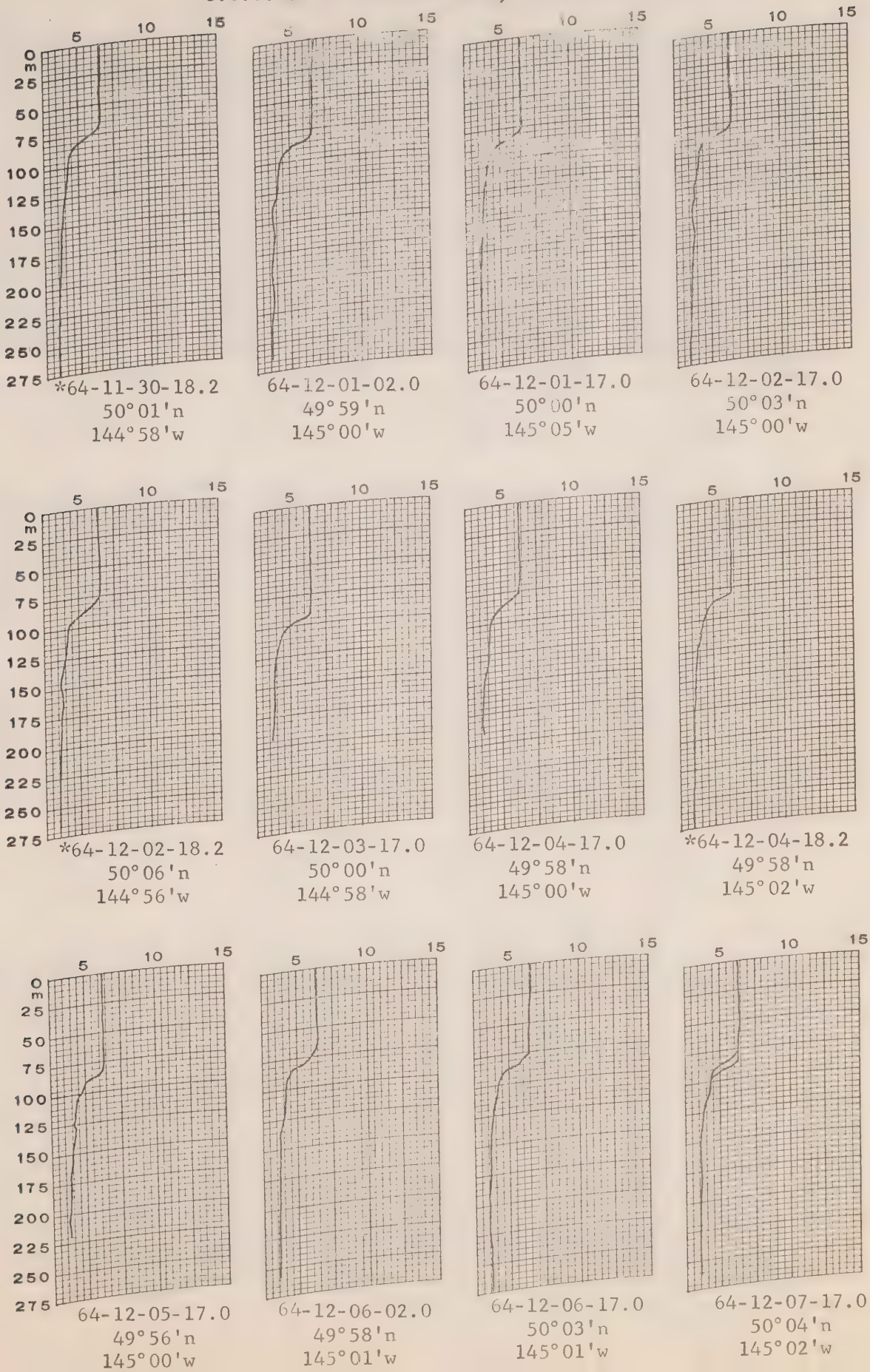


64-11-25-17.0
50°03'n
145°00'w

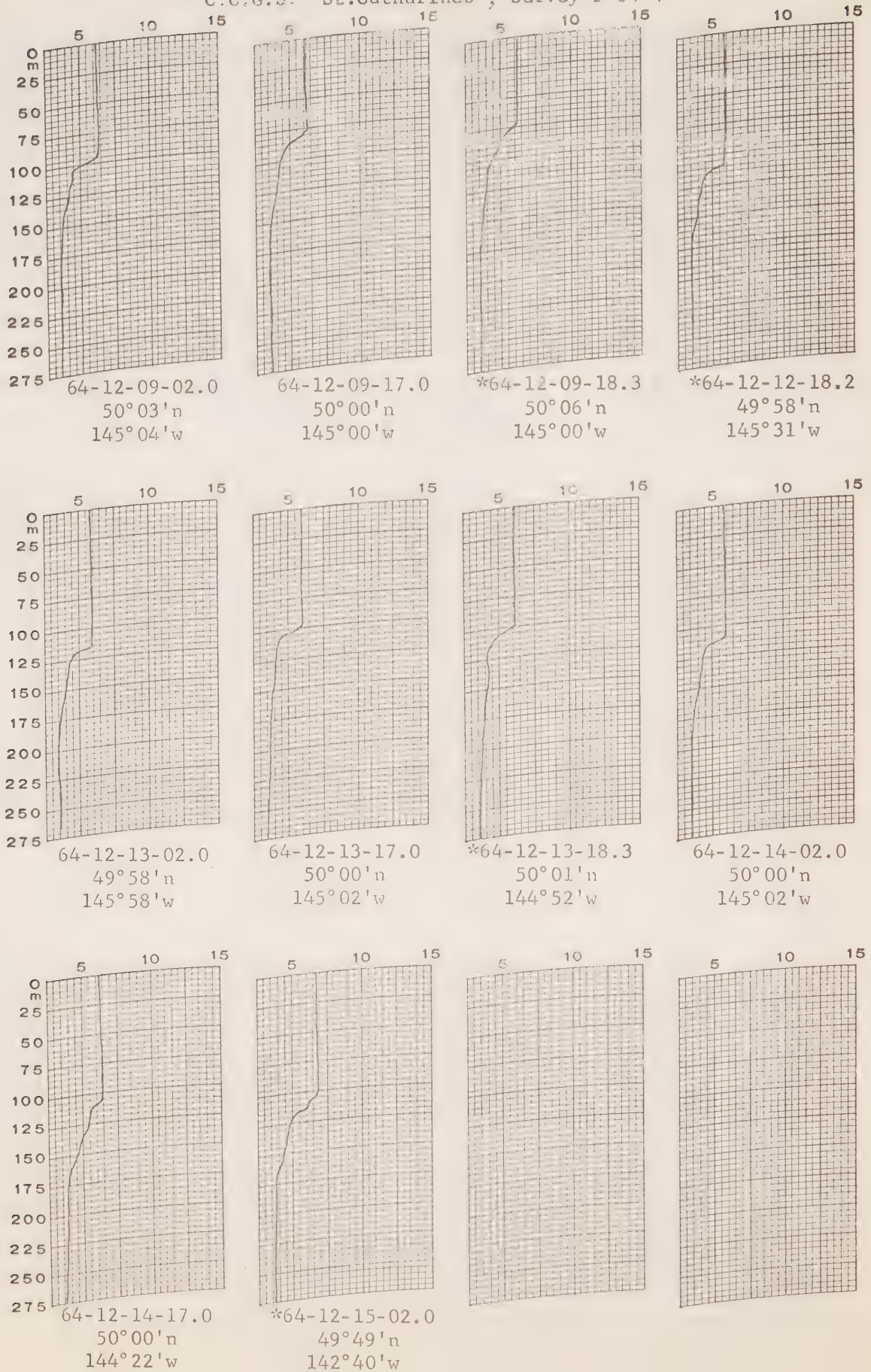
C.C.G.S. "St. Catharines", Survey P-64-4



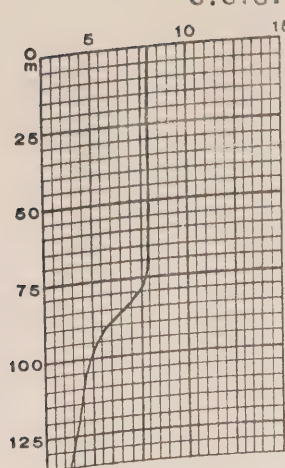
C.C.G.S. "St. Catharines", Survey 2-4-4



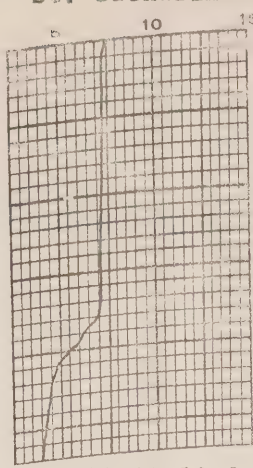
C.C.G.S. "St.Catharines", Survey P-64-4



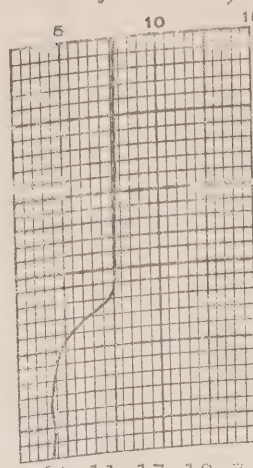
C.C.G.S. "St. Catharines", Survey P-64-4, OCEAN series



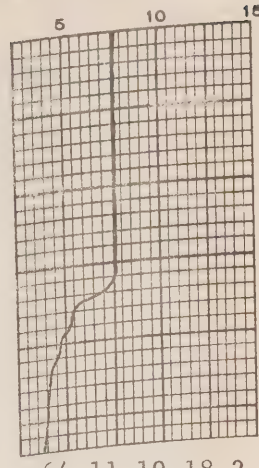
64-11-10-19.2
50°02'n
144°55'w



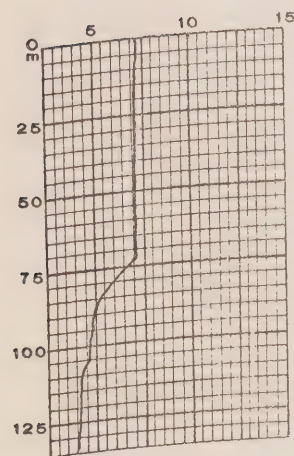
64-11-14-19.2
50°07'n
144°55'w



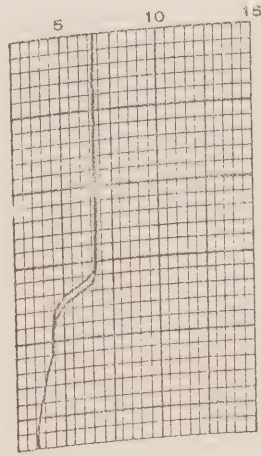
64-11-17-18.7
49°54'n
144°55'w



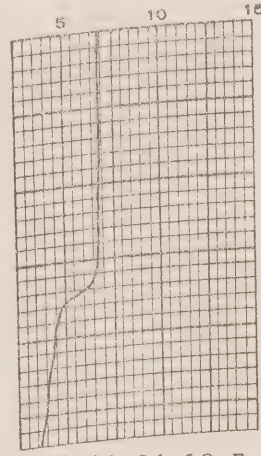
64-11-19-18.2
50°05'n
144°58'w



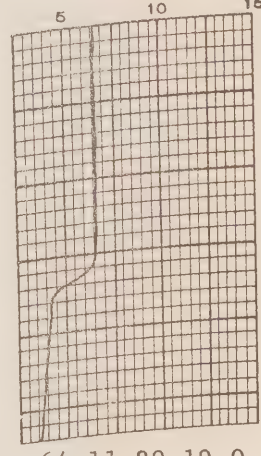
64-11-22-19.0
50°06'n
145°06'w



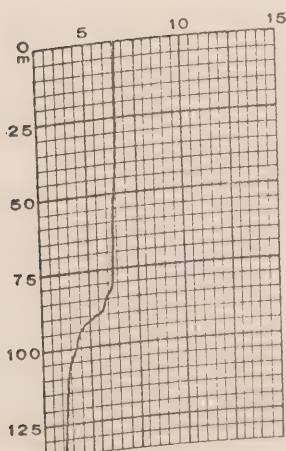
64-11-24-18.2
49°58'n
145°03'w



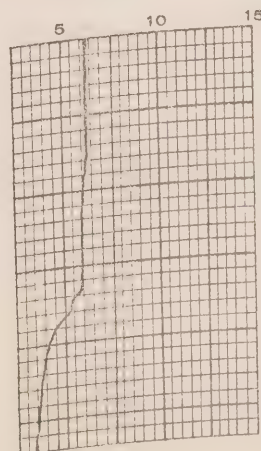
64-11-26-18.7
50°04'n
144°54'w



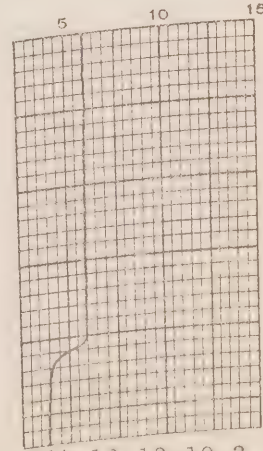
64-11-29-19.0
50°07'n
144°58'w



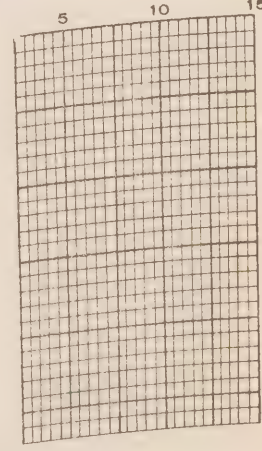
64-12-06-18.2
50°03'n
145°02'w



64-12-08-19.2
50°08'n
145°15'w



64-12-13-19.2
50°01'n
144°52'w



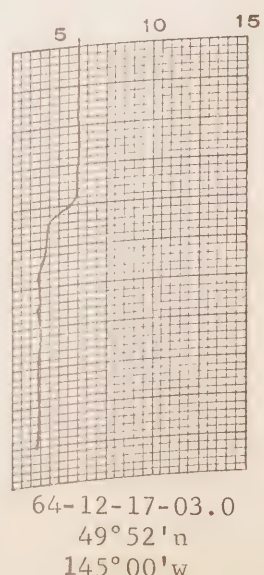
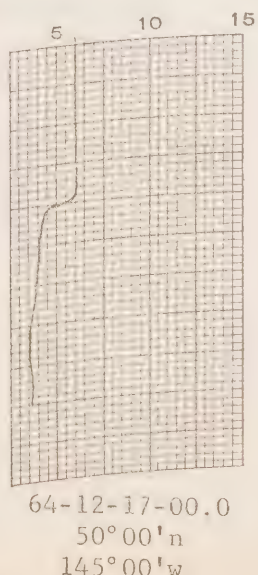
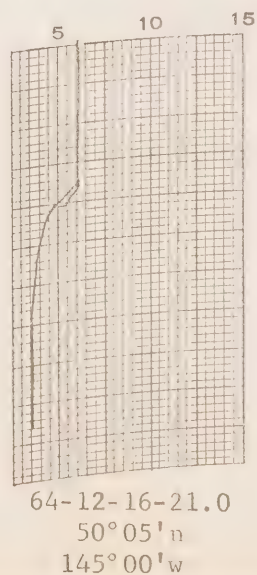
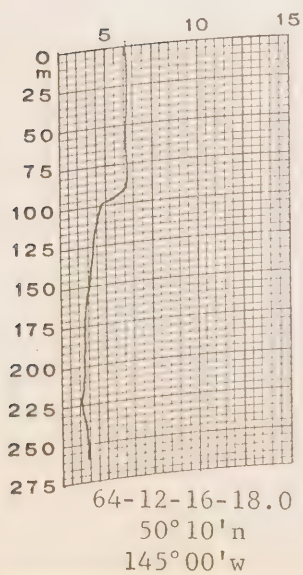
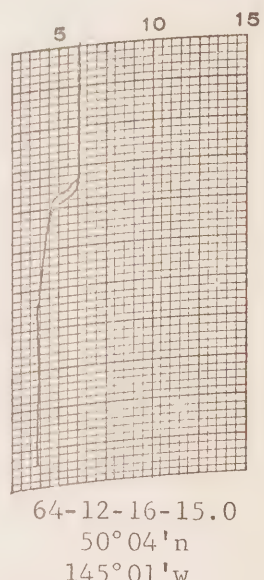
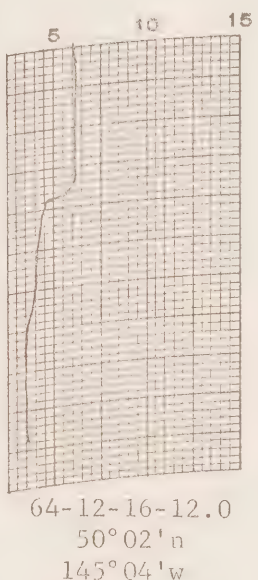
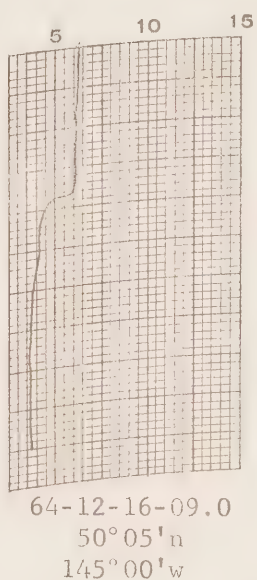
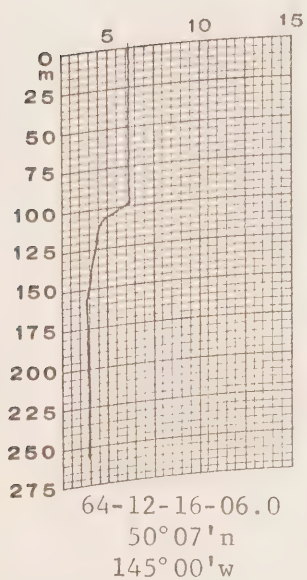
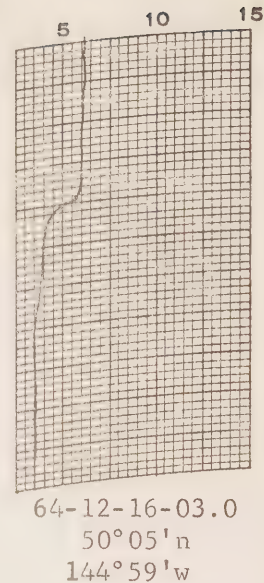
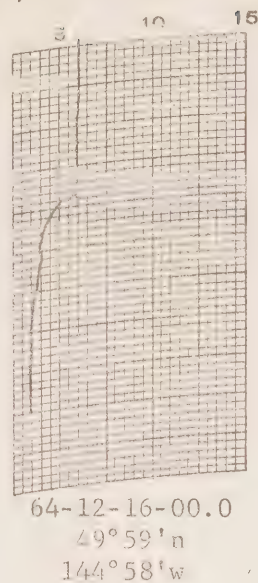
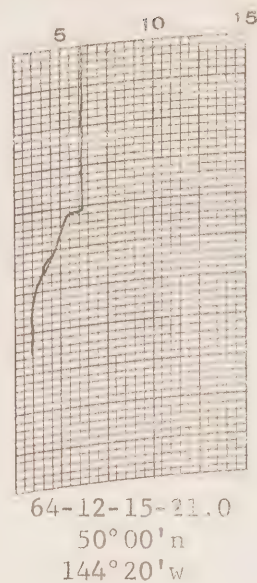
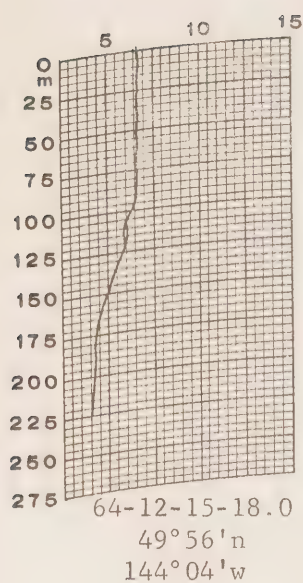
CCGS "STONE TOWN" Patrol No. 63

Daily Bathythermograms

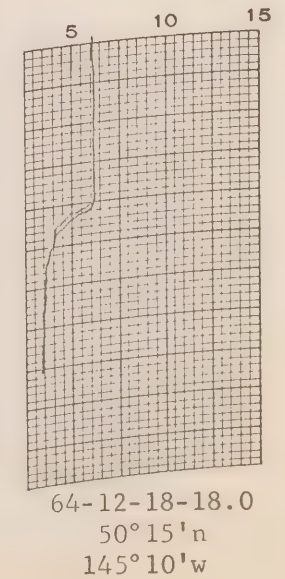
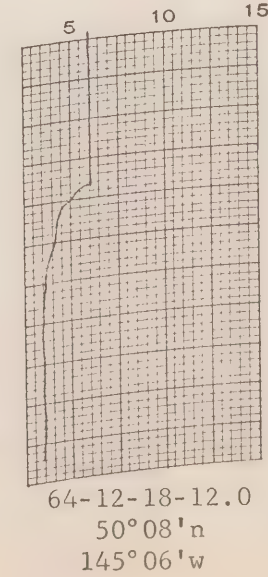
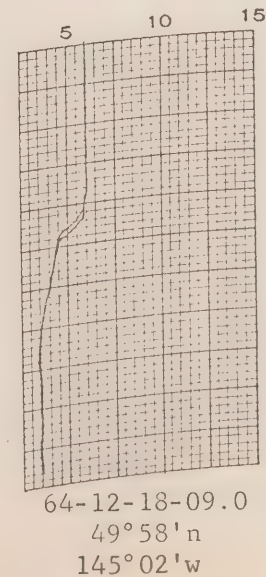
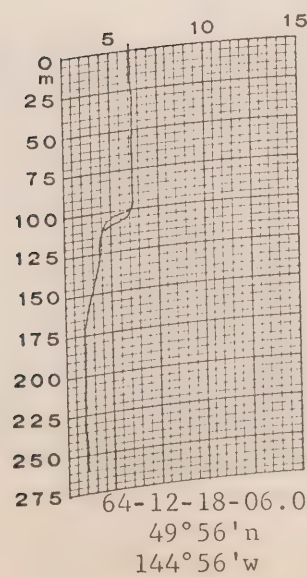
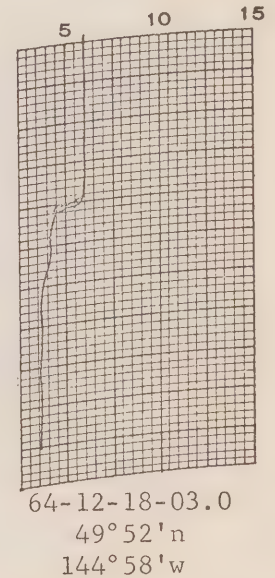
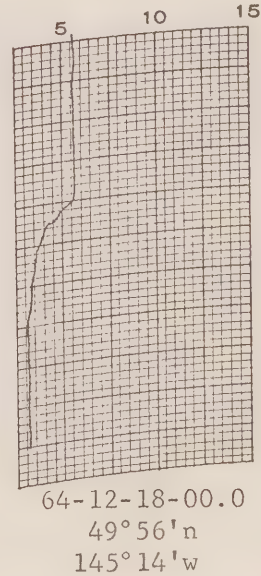
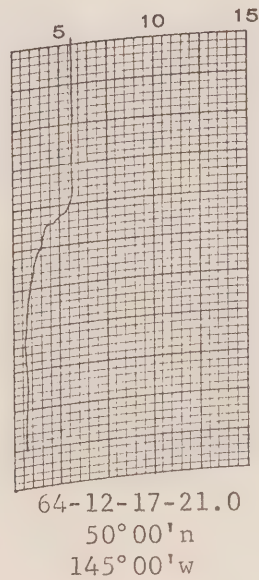
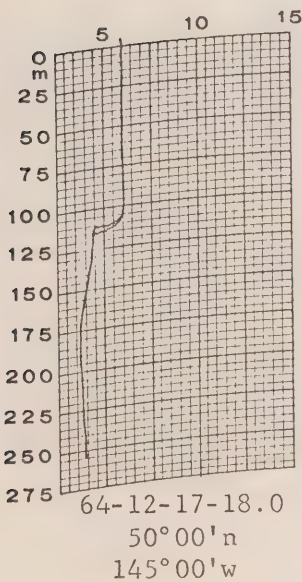
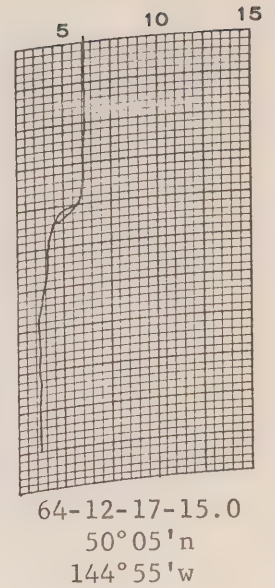
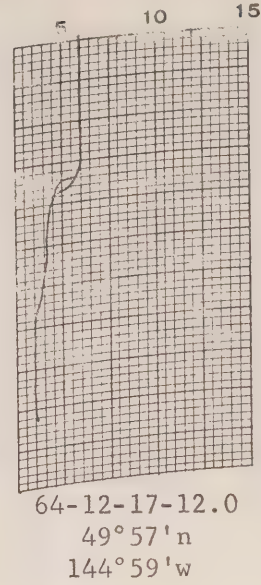
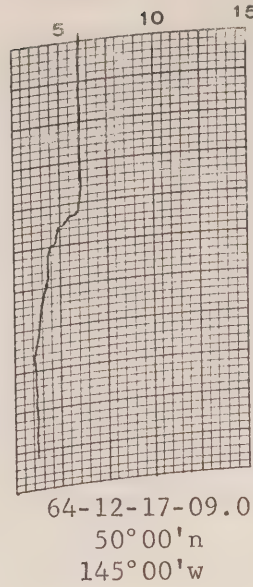
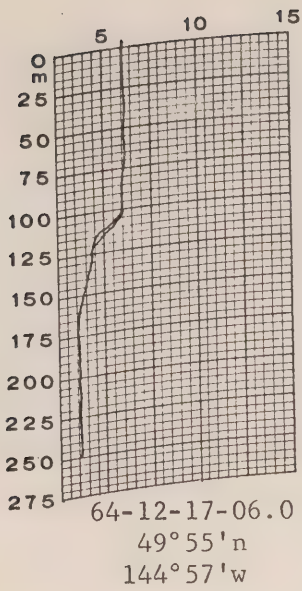
and

OCEAN series bathythermograms

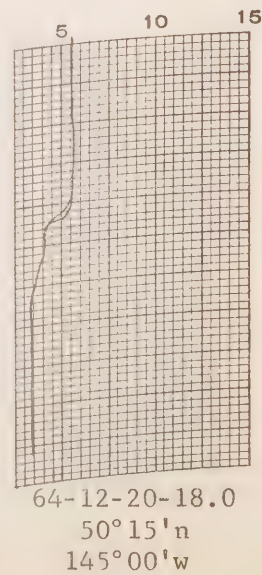
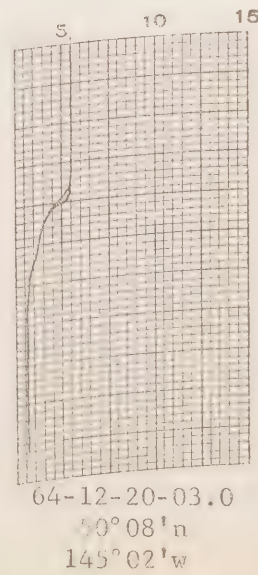
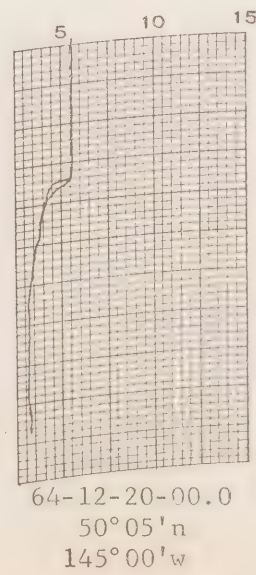
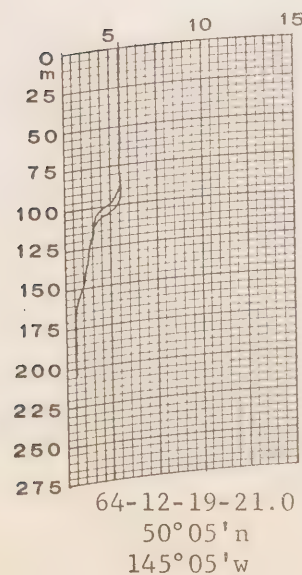
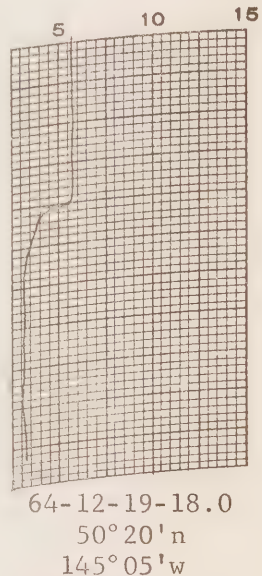
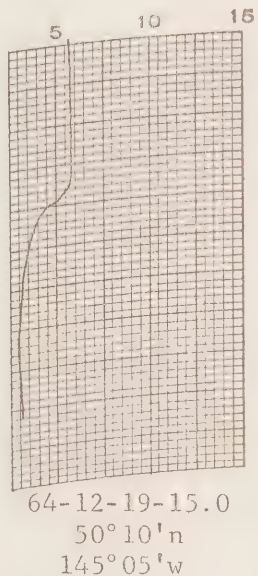
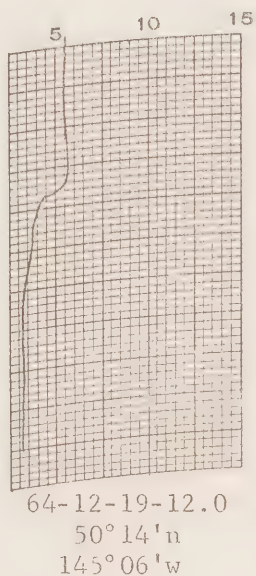
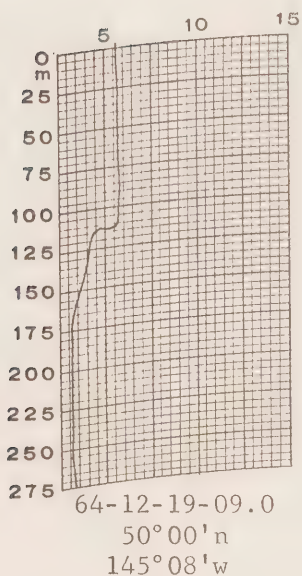
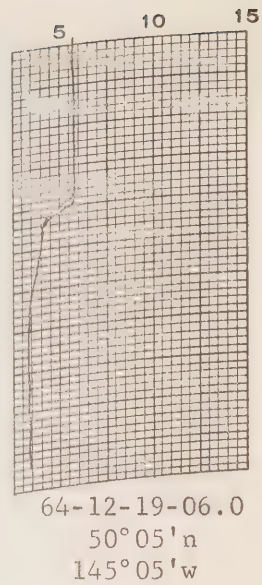
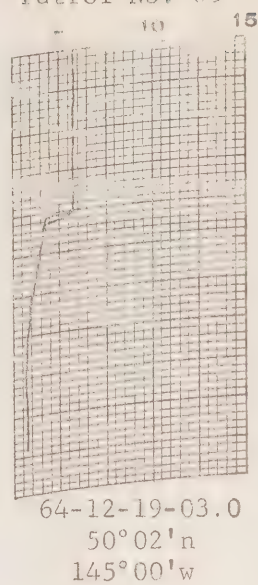
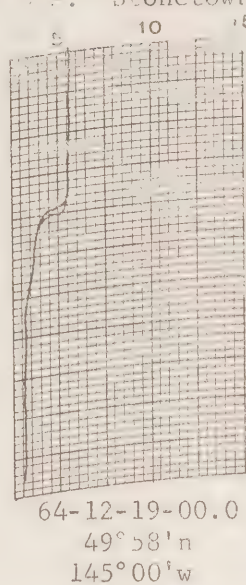
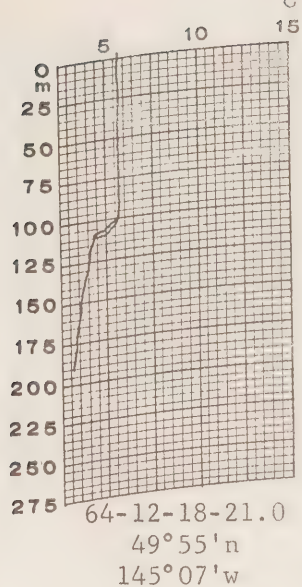
C.C.G.S. "Stonetown", Patrol No. 63



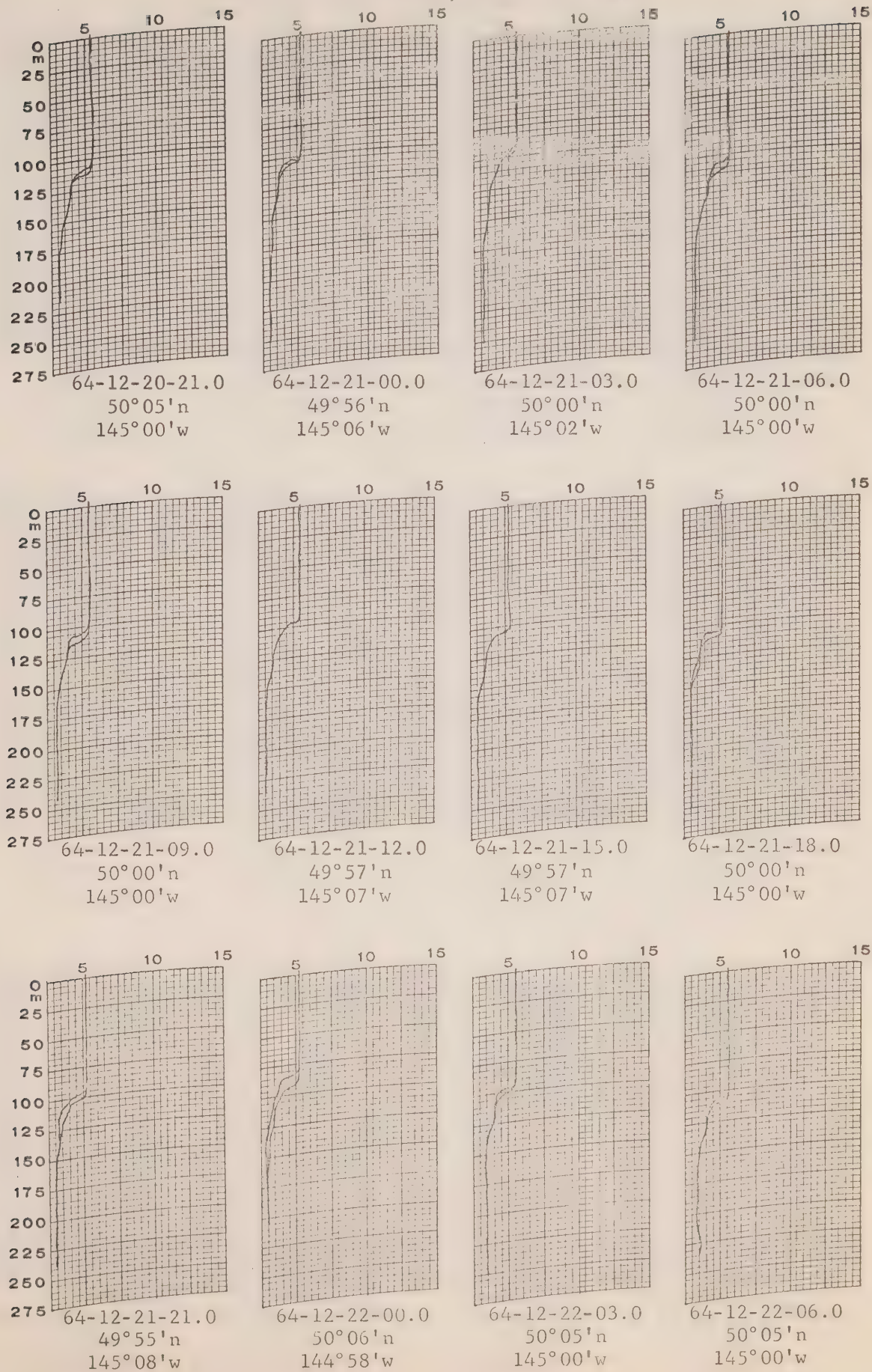
C.C.G.S. "Stonetown", Patrol No. 63



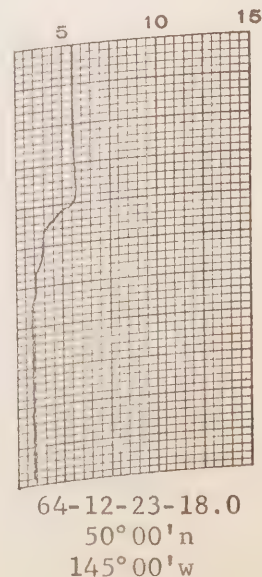
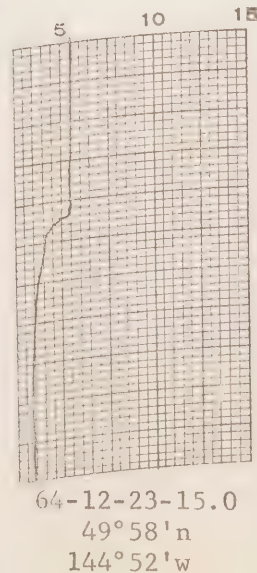
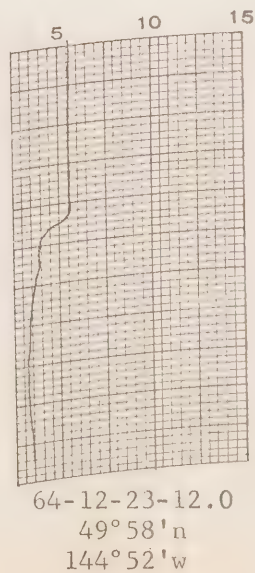
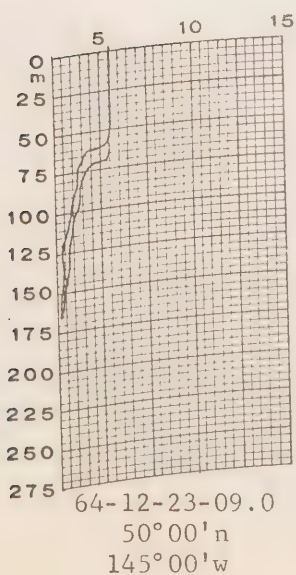
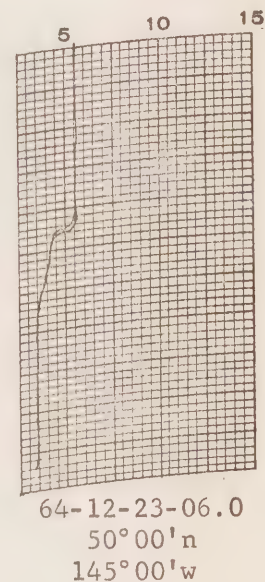
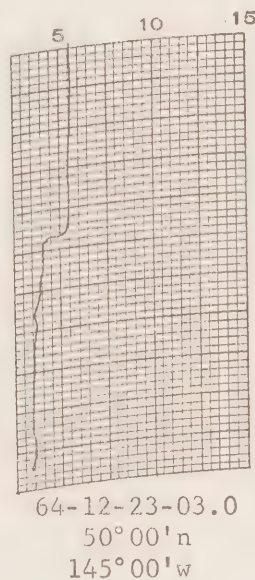
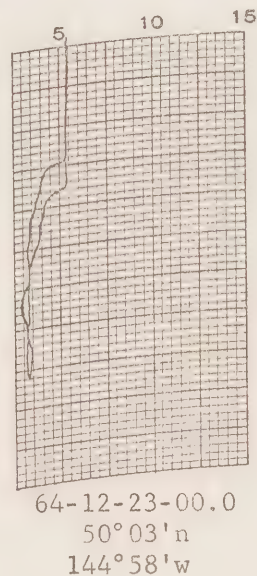
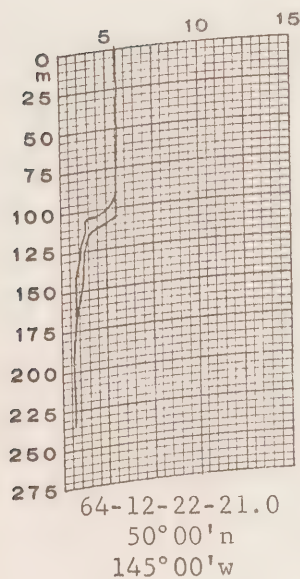
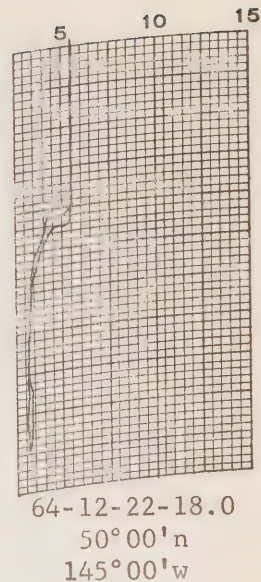
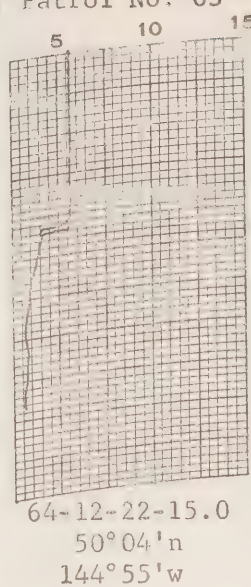
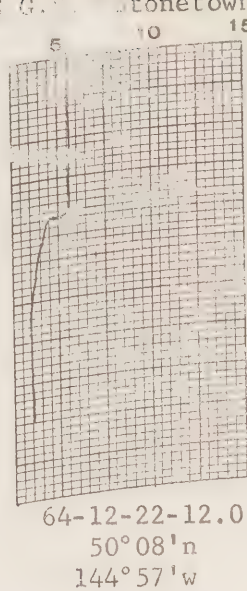
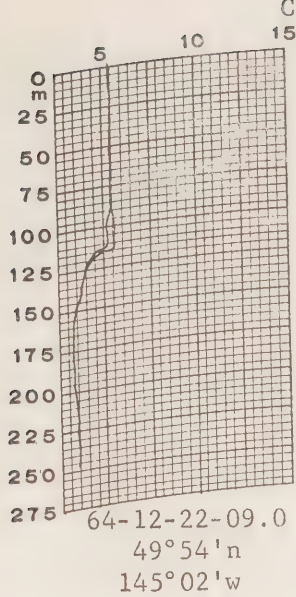
C.C. C.E. "Stonetown", Patrol No. 63



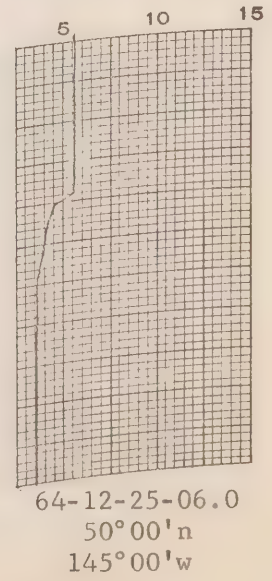
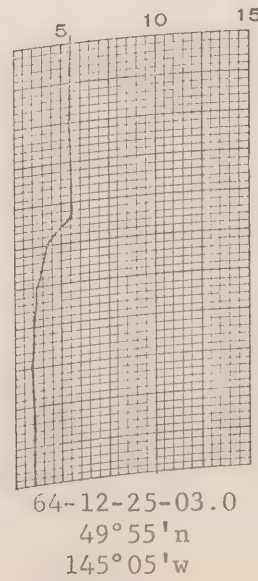
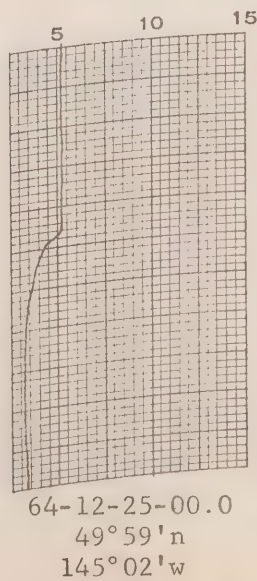
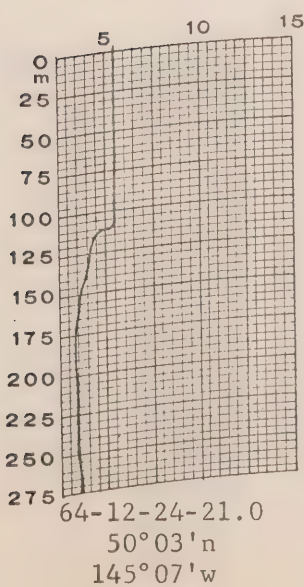
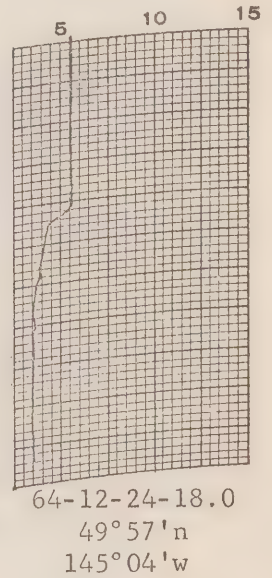
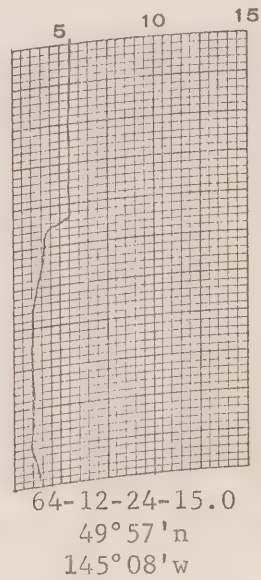
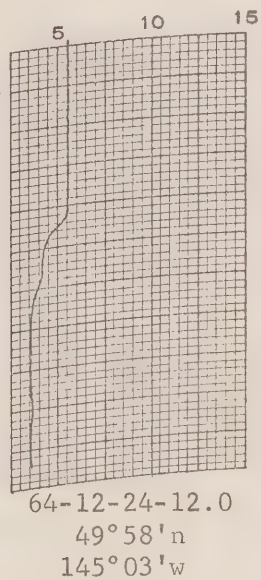
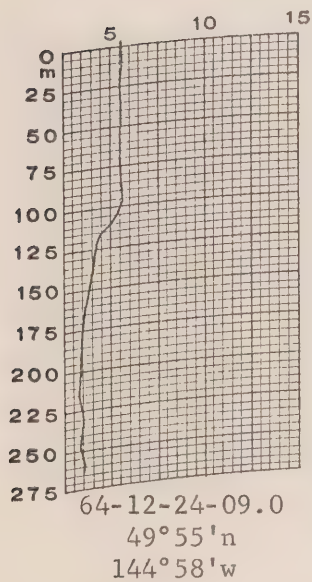
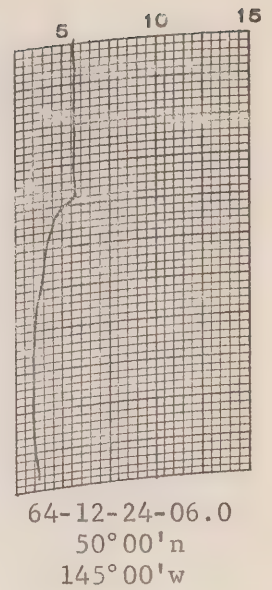
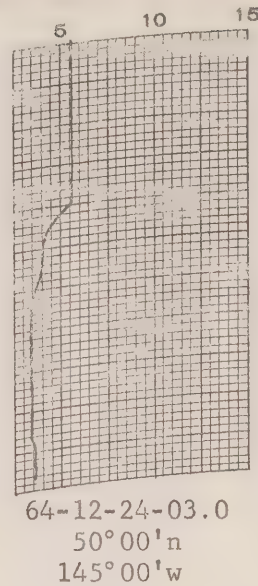
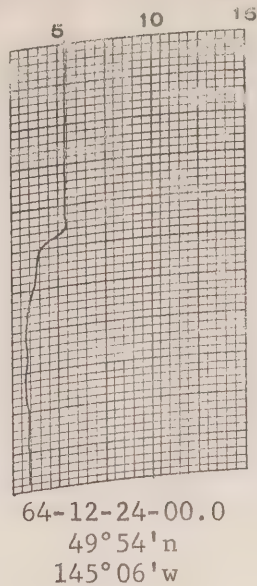
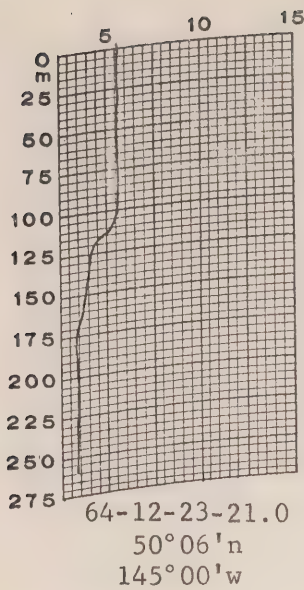
C.C.G.S. "Stonetown", Patrol No. 63



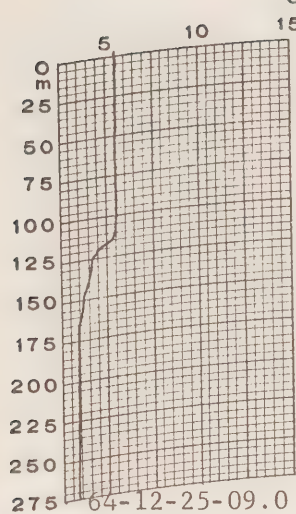
C.C.G. "Stonetown", Patrol No. 63



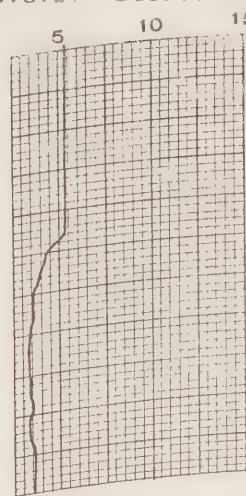
C.C.G.S. "Stonetown", Patrol No. 63



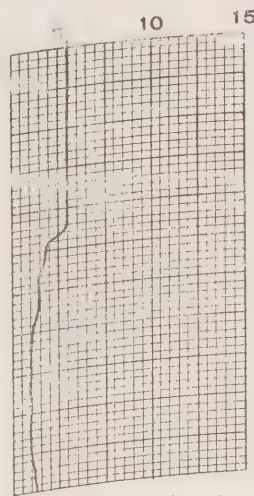
C.C.G.S. "Stonetown", Patrol No. 63



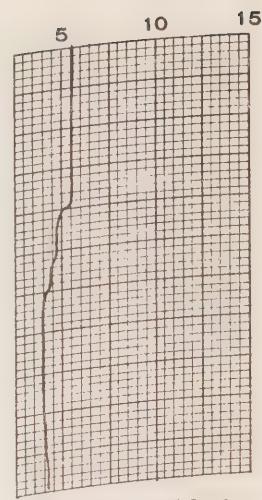
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145°15'w



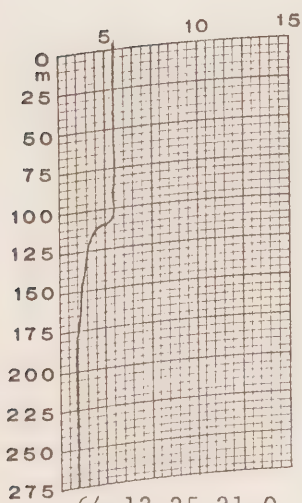
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50°00'n
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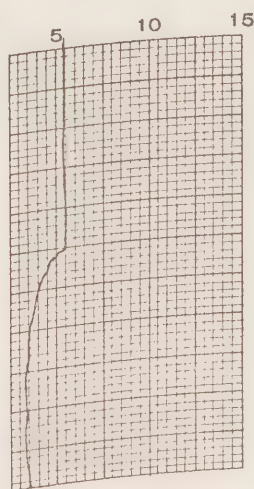
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50°00'n
145°00'w



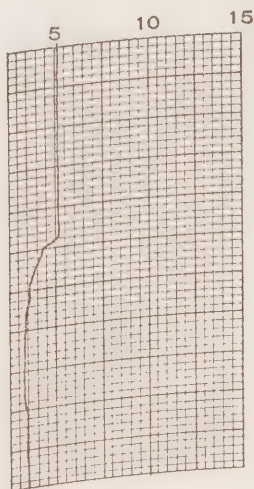
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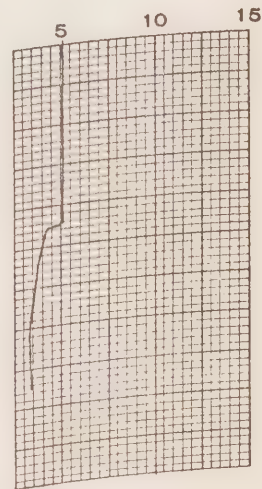
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50°02'n
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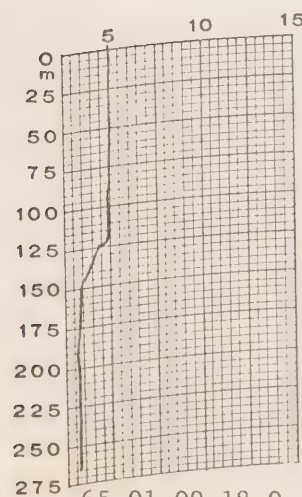
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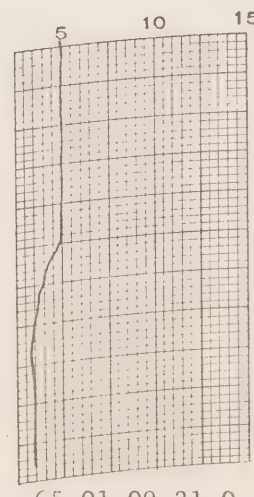
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50°25'n
145°25'w



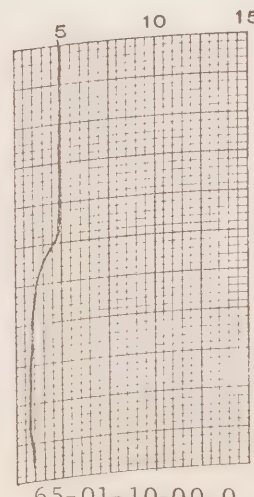
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50°16'n
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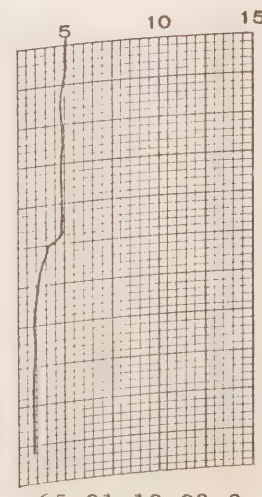
65-01-09-18.0
49°55'n
145°02'w



65-01-09-21.0
50°00'n
145°02'w

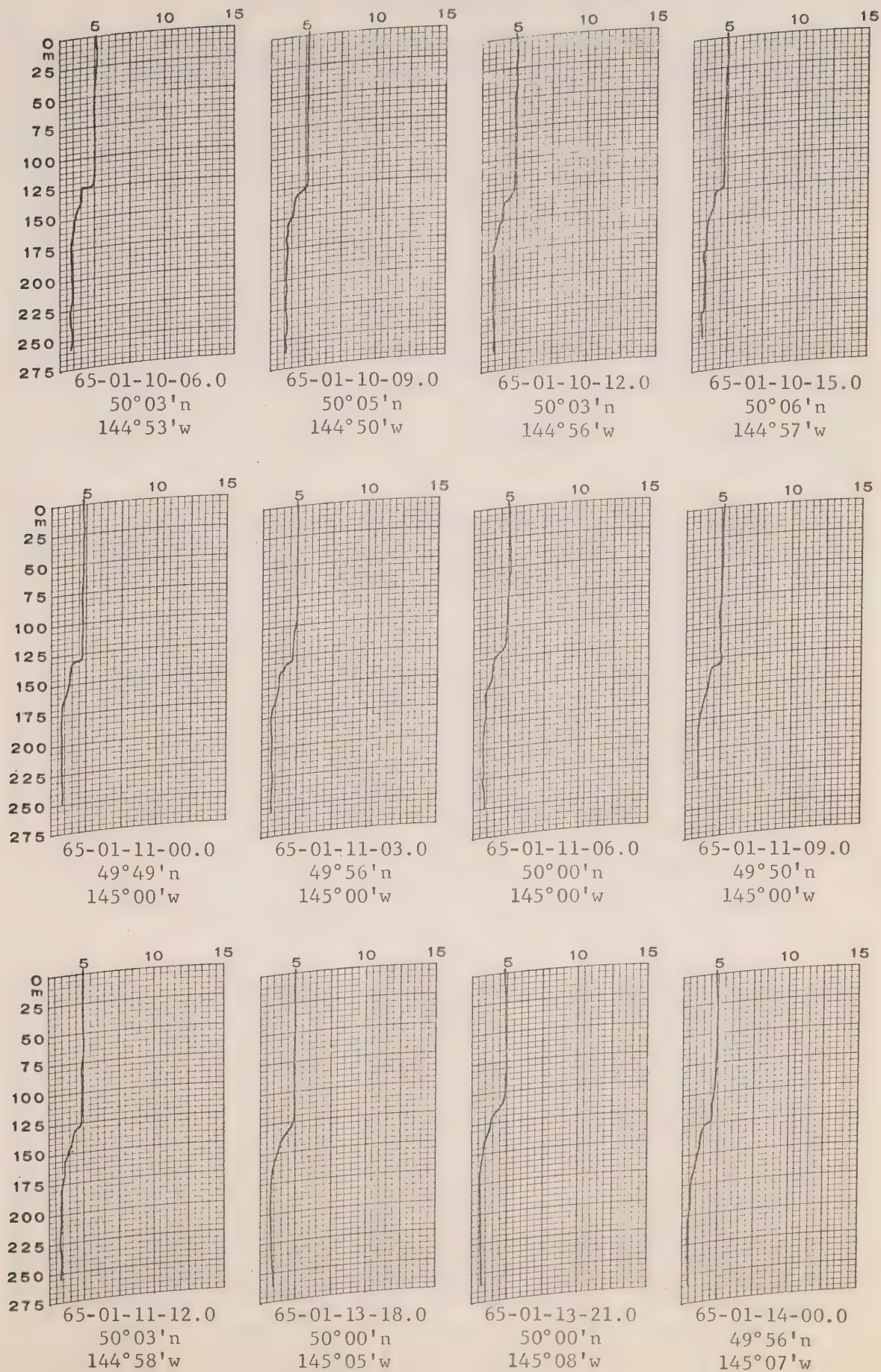


65-01-10-00.0
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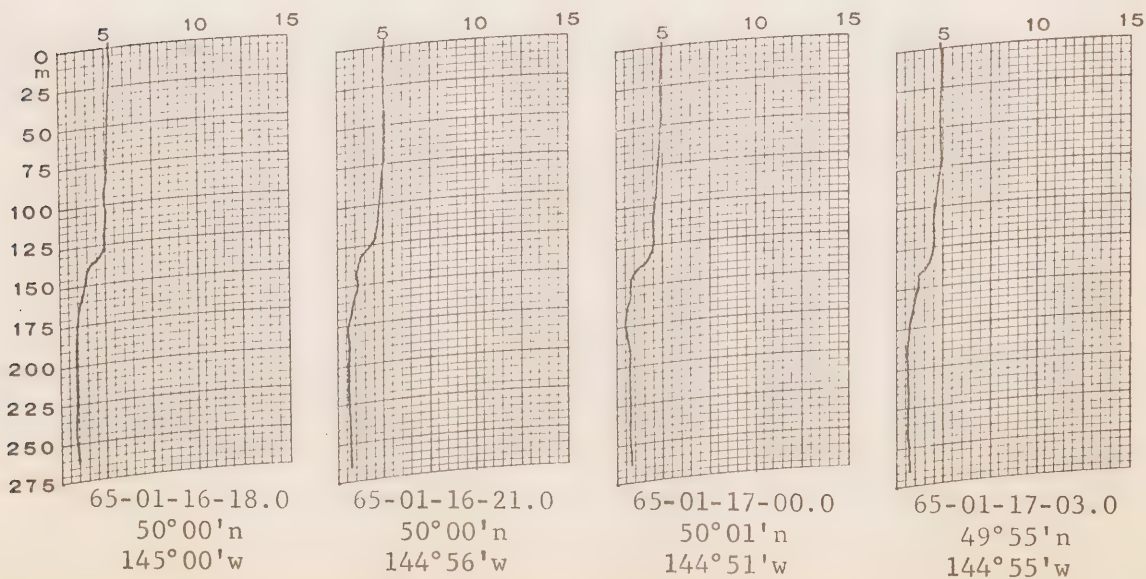
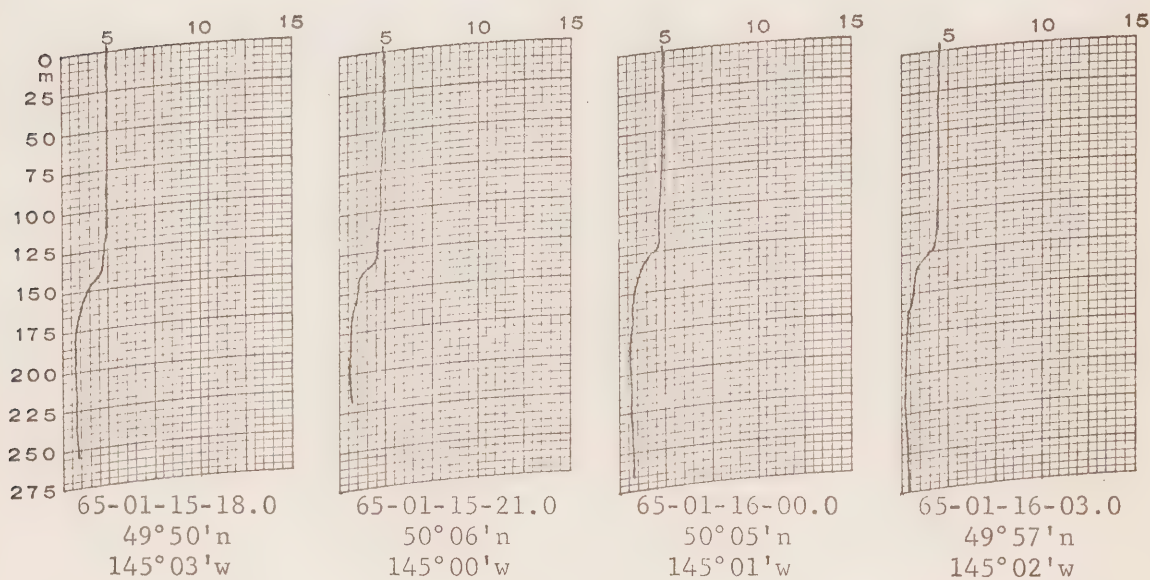
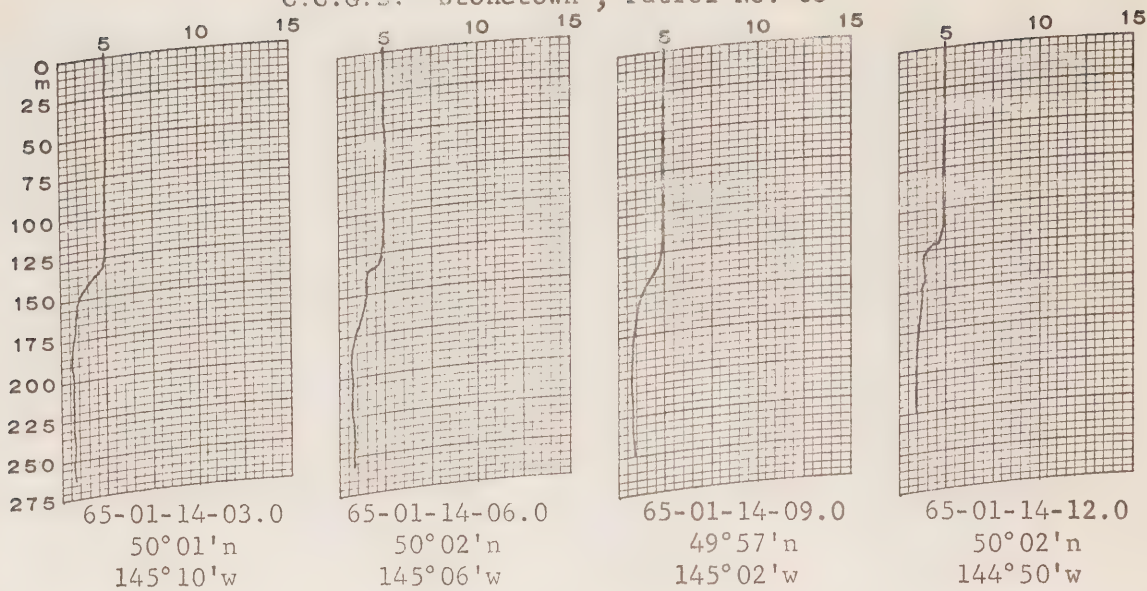


65-01-10-03.0
50°07'n
144°50'w

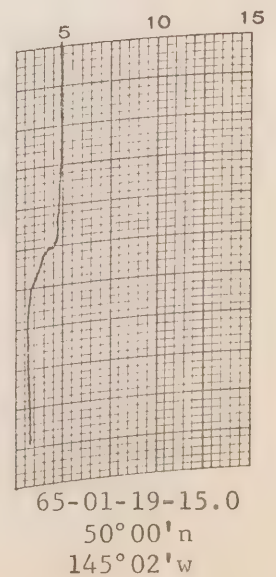
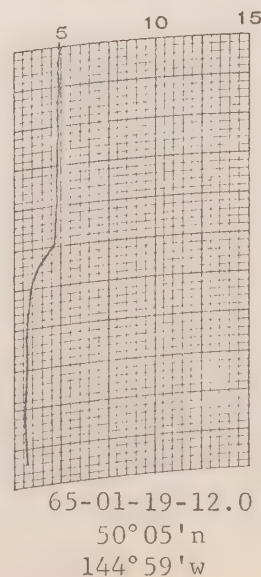
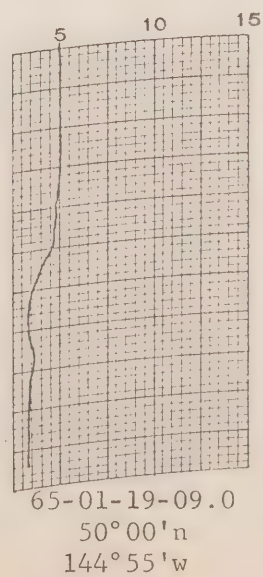
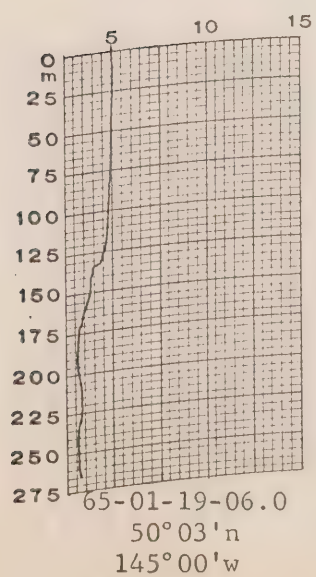
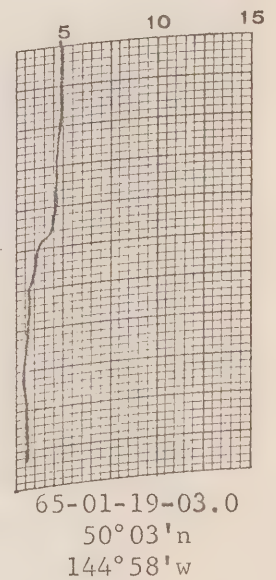
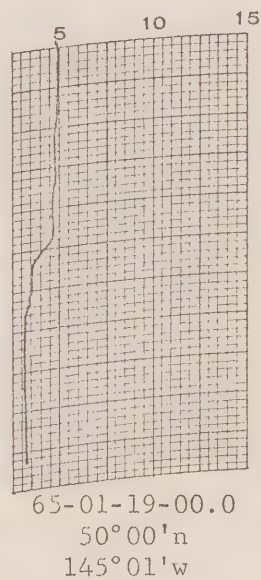
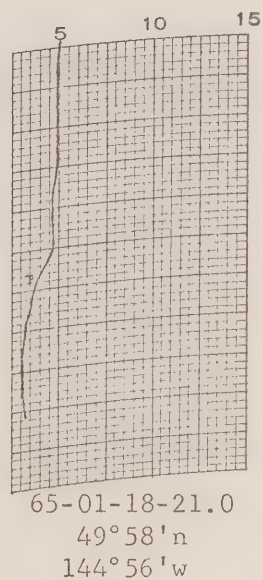
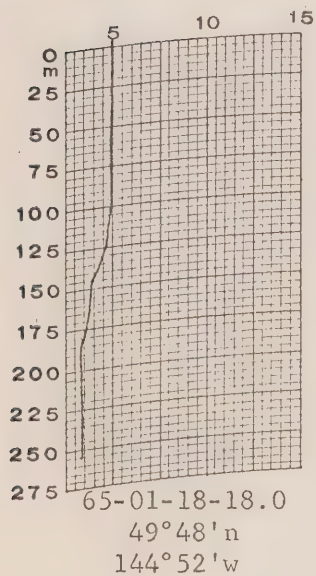
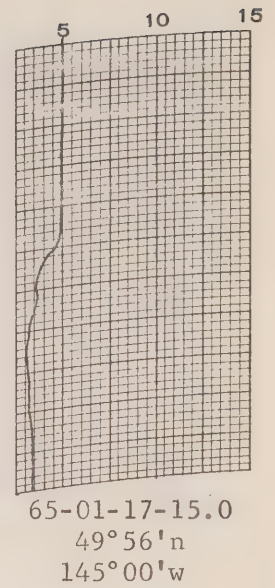
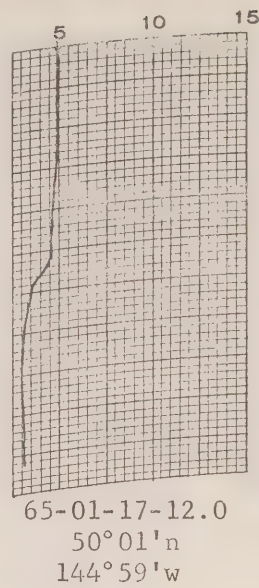
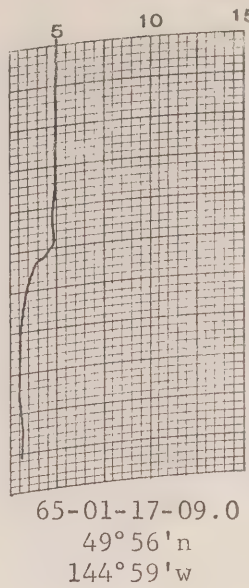
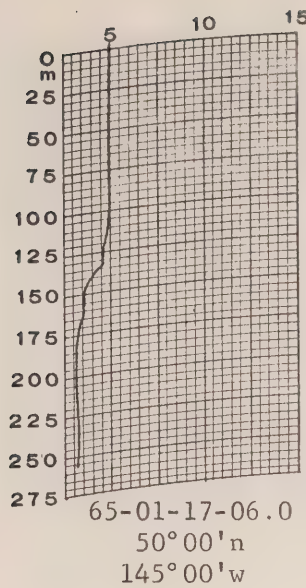
C.C.G.S. "Stonetown", Patrol No. 15



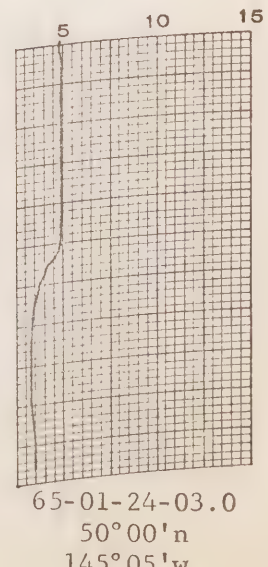
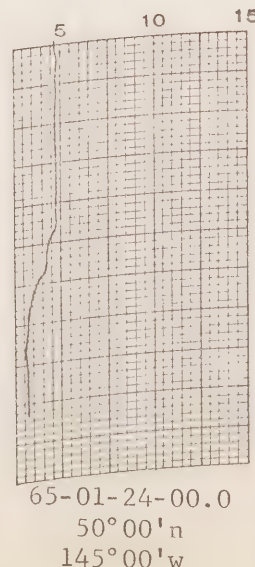
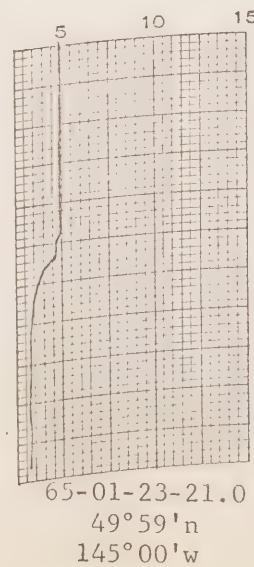
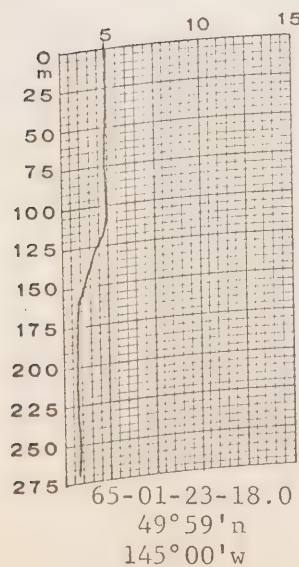
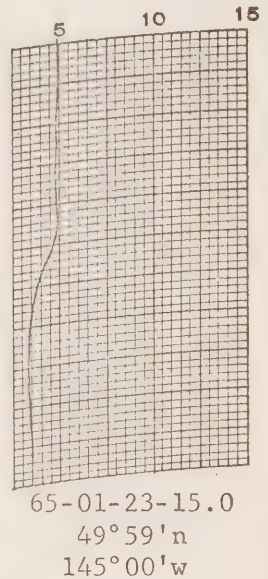
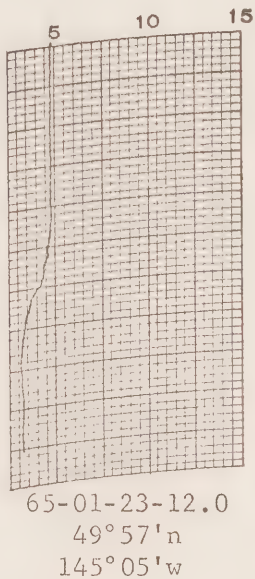
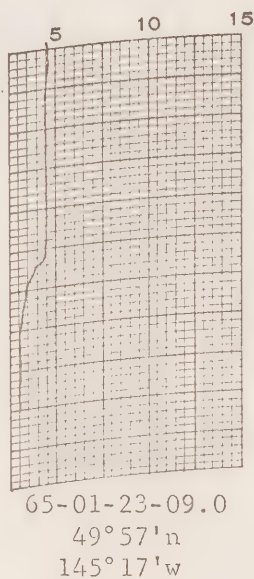
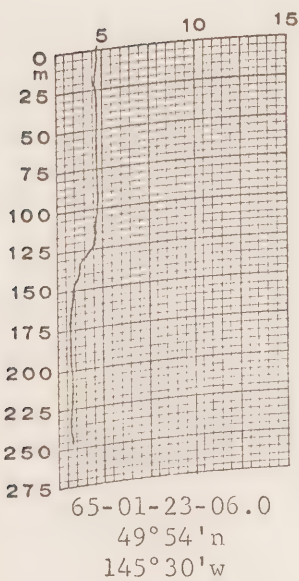
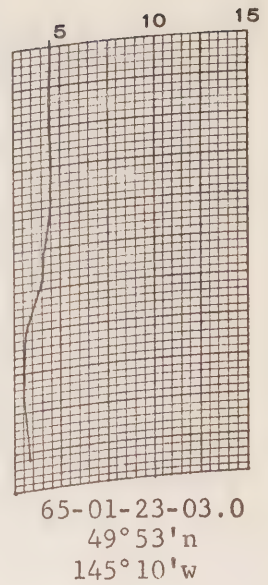
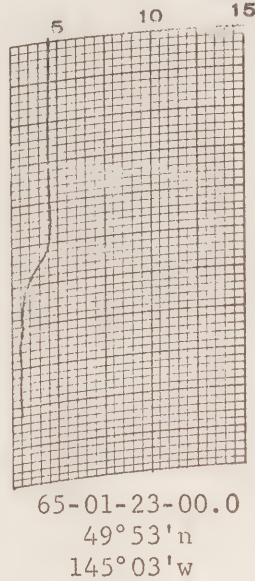
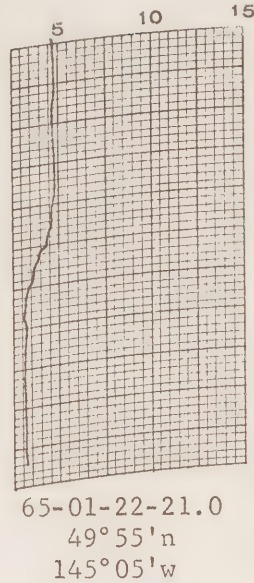
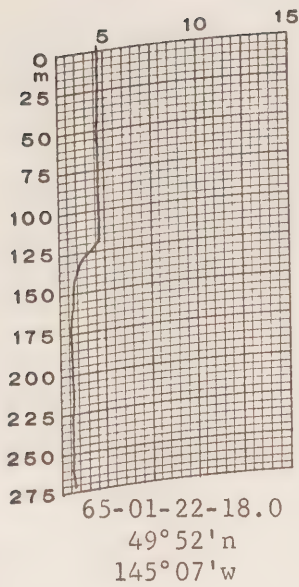
C.C.G.S. "Stonetown", Patrol No. 63



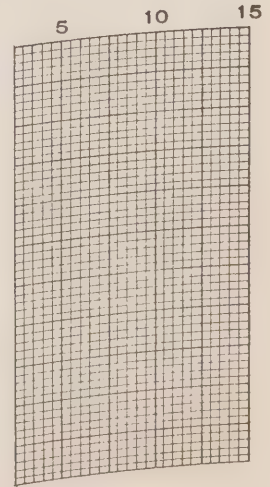
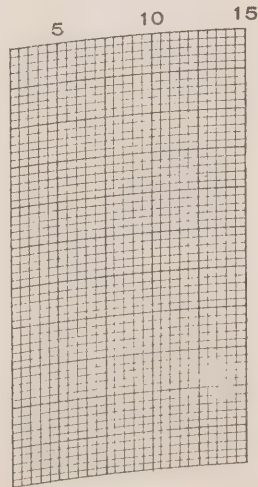
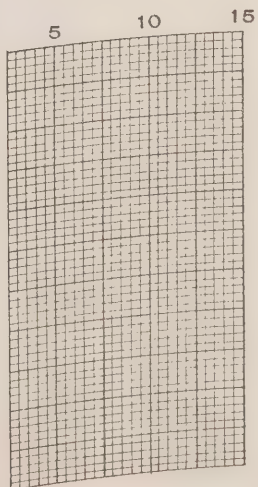
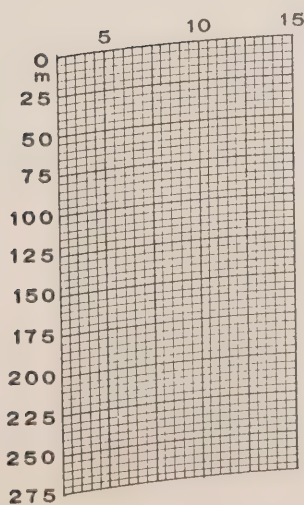
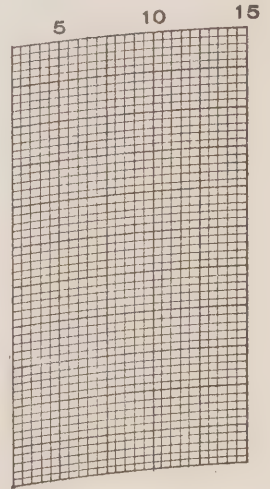
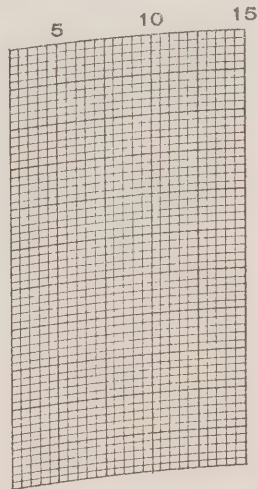
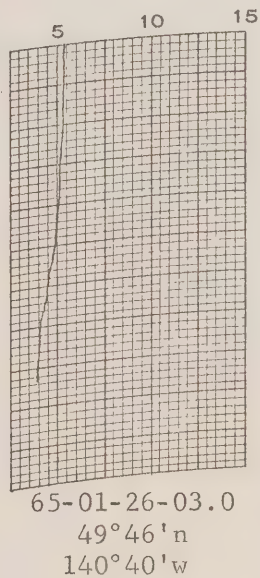
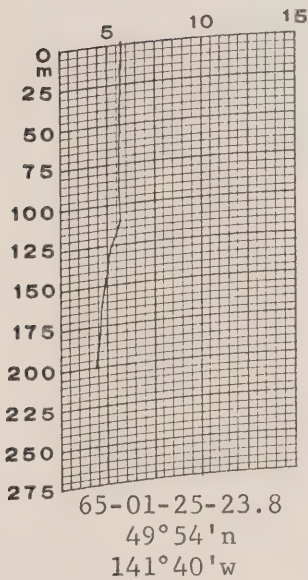
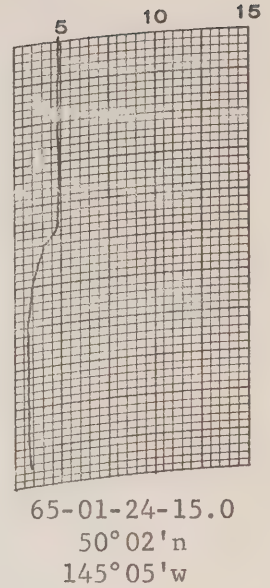
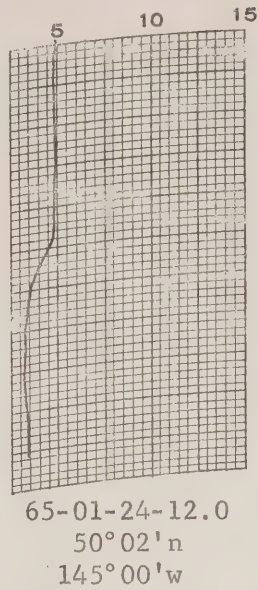
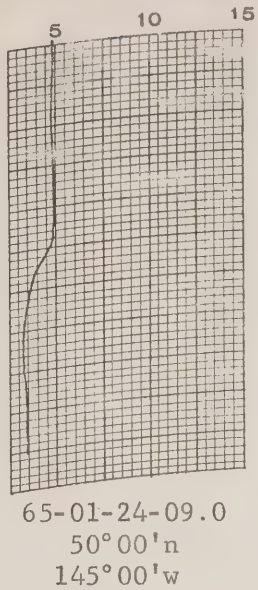
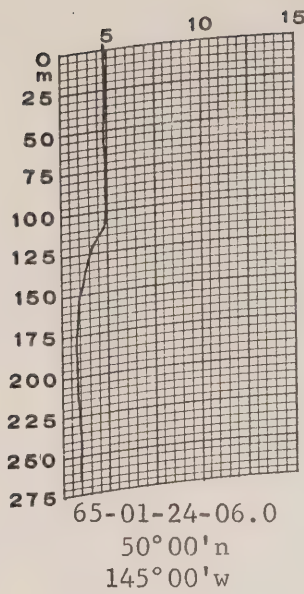
C.C.G.S. "Stonetown", Patrol No. 63



C.C.G.S. "Stonetown", Patrol No. 63



C.C.G.S. "Stonetown", Patrol No. 63



SECTION V

Surface Salinity Data

Surface salinity observations, Ocean Weather Station "P"

Date - Time GMT	Position		Salinity ‰
CCGS "St. Catharines", Survey P-64-4			
64-10-31-05.0	48°42'n.	126°40'w.	31.385
64-11-01-02.5	48°58'	130°17'	32.414
01-07.4	49°06'	131°40'	32.445
01-10.5	49°12'	132°40'	32.459
01-13.8	49°19'	133°40'	32.485
01-18.2	49°24'	134°40'	32.465
01-21.8	49°24'	135°40'	32.503
02-01.0	49°27'	136°40'	32.494
02-06.0	49°30'	137°40'	32.544
02-10.8	49°33'	138°40'	32.624
02-15.5	49°40'	139°40'	32.664
02-19.0	49°42'	140°40'	32.647
03-04.0	49°50'	142°40'	32.696
04-02.0	49°57'	144°54'	32.711
05-00.2	49°44'	145°18'	32.676
05-02.0	49°55'	145°10'	32.559
06-02.0	50°10'	145°15'	32.657
07-02.0	50°05'	145°18'	32.715
08-02.0	50°03'	145°04'	32.721
09-02.0	50°02'	145°23'	32.639
10-02.0	50°00'	144°50'	32.702
11-02.0	50°00'	145°04'	32.714
12-02.0	50°01'	145°19'	32.935 (D)
13-02.0	49°59'	144°58'	32.647
14-02.0	50°00'	144°54'	32.685
15-02.0	49°53'	145°07'	32.669
16-02.0	50°04'	144°58'	32.507
17-02.0	49°43'	145°01'	32.668
18-02.0	49°54'	144°53'	32.668
19-02.0	49°58'	144°42'	32.649
20-02.0	50°01'	145°08'	32.663
21-02.0	50°00'	145°05'	32.674
22-02.0	49°57'	144°57'	32.709
23-02.0	50°04'	145°06'	32.692
24-02.0	50°04'	145°05'	32.617
25-02.0	50°04'	145°05'	32.689
26-02.0	50°04'	145°06'	32.717
27-02.0	50°03'	145°01'	32.737
28-02.0	50°03'	144°58'	32.766
29-02.0	49°59'	144°59'	32.720
30-02.0	50°00'	145°00'	32.685

(D) Doubtful

Surface salinity observations, Ocean Weather Station "P"

Date - Time GMT	Position		Salinity ‰
CCGS "St. Catharines", Survey P-64-4			
64-12-01-02.0	49°59'	145°00'	32.677
02-02.0	49°56'	145°26'	32.724
03-02.0	49°59'	144°50'	32.682
04-02.0	49°56'	145°15'	32.713
05-02.0	49°50'	145°03'	32.296
06-02.0	49°58'	145°01'	32.702
07-02.0	50°03'	145°00'	32.255
08-02.0	50°01'	145°01'	32.740
10-02.0	50°02'	145°04'	32.687
11-02.0	50°26'	145°51'	32.731
12-02.0	50°01'	145°05'	32.599
13-02.0	49°58'	145°03'	32.740
14-02.0	50°00'	145°02'	32.751
15-01.0	49°55'	143°40'	32.728
15-08.8	49°45'	141°40'	32.671
15-10.8	49°42'	140°40'	32.644
15-13.2	49°35'	139°40'	32.652
15-16.2	49°33'	138°40'	32.615
15-18.8	49°30'	137°40'	32.555
15-21.8	49°26'	136°40'	32.511
16-00.5	49°23'	135°40'	32.558
16-03.4	49°19'	134°40'	32.738
16-06.5	49°16'	133°40'	32.533
16-08.8	49°10'	132°40'	32.547
16-12.1	49°06'	131°40'	32.496
16-15.8	49°00'	130°40'	32.506
16-18.1	48°56'	129°40'	32.548
16-21.4	48°47'	128°40'	32.128
17-00.5	48°46'	127°40'	32.088
17-03.5	48°43'	126°40'	32.084

CCGS "Stonetown", Patrol No. 63

64-12-15-02.0	50°00'n.	144°50'w.	32.752
16-02.0	49°55'	145°00'	32.743
17-02.0	49°53'	145°09'	32.753
18-02.0	49°56'	145°00'	32.725
19-02.0	50°05'	145°00'	32.719
21-02.0	50°00'	145°00'	32.733
22-02.0	50°00'	145°00'	32.749
23-02.0	50°00'	145°00'	32.748

Surface salinity observations, Ocean Weather Station "P"

Date - Time GMT	Position		Salinity ‰
CCGS "Stonetown", Patrol No. 63			
64-12-24-02.0	49°56'n.	145°03'w.	32.757
25-02.0	50°00'	145°06'	32.776
27-20.0	50°30'	146°00'	32.749
28-02.0	49°55'	144°55'	32.863
29-02.0	49°53'	144°45'	33.022
30-02.0	50°00'	145°00'	32.784
64-12-31-02.0	49°58'	145°05'	32.839
65-01-09-02.0	50°05'	144°55'	32.781
10-02.0	49°49'	145°04'	32.784
11-02.0	49°55'	145°03'	32.767
12-02.0	50°07'	144°50'	32.765
13-02.0	50°00'	145°07'	32.771
14-02.0	50°10'	145°03'	32.754
15-02.0	50°03'	145°00'	32.785
16-02.0	49°58'	144°55'	32.778
17-02.0	49°52'	144°50'	32.759
18-02.0	50°03'	145°02'	32.733
19-02.0	50°03'	145°00'	32.459
20-02.0	49°35'	145°00'	32.777
21-02.0	49°35'	145°45'	32.762
22-02.0	49°51'	145°07'	32.805
23-02.0	50°00'	145°00'	32.811
24-02.0	49°57'	145°30'	32.847

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- Canadian Oceanographic Data Centre, 1965
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CANADA

DATA RECORD

GULF OF ST. LAWRENCE

July 23 to August 23, 1964

No. 9

1965 Data Record Series

Canadian Oceanographic Data Centre

Programmed by the
Canadian Committee on Oceanography

1965

ROGER DUHAMEL, F. R. S. C.
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GULF OF ST. LAWRENCE

July 23 to August 23, 1964

CODC Reference: 01-64-001

No. 9

1965 Data Record Series

Canadian Oceanographic Data Centre

615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography

FISHERIES RESEARCH BOARD OF CANADA

GULF OF ST. LAWRENCE

Ship:	CNAV "Sackville"
Local cruise designation:	S-79
Cruise period:	July 23 - August 23, 1964
Observers:	B. L. Blackford D. H. Loring R. W. Trites

ATLANTIC OCEANOGRAPHIC GROUP

Bedford Institute of Oceanography, Dartmouth, N. S.

SECTION I

Description of data collection procedures



"SACKVILLE"

Fisheries Research Board

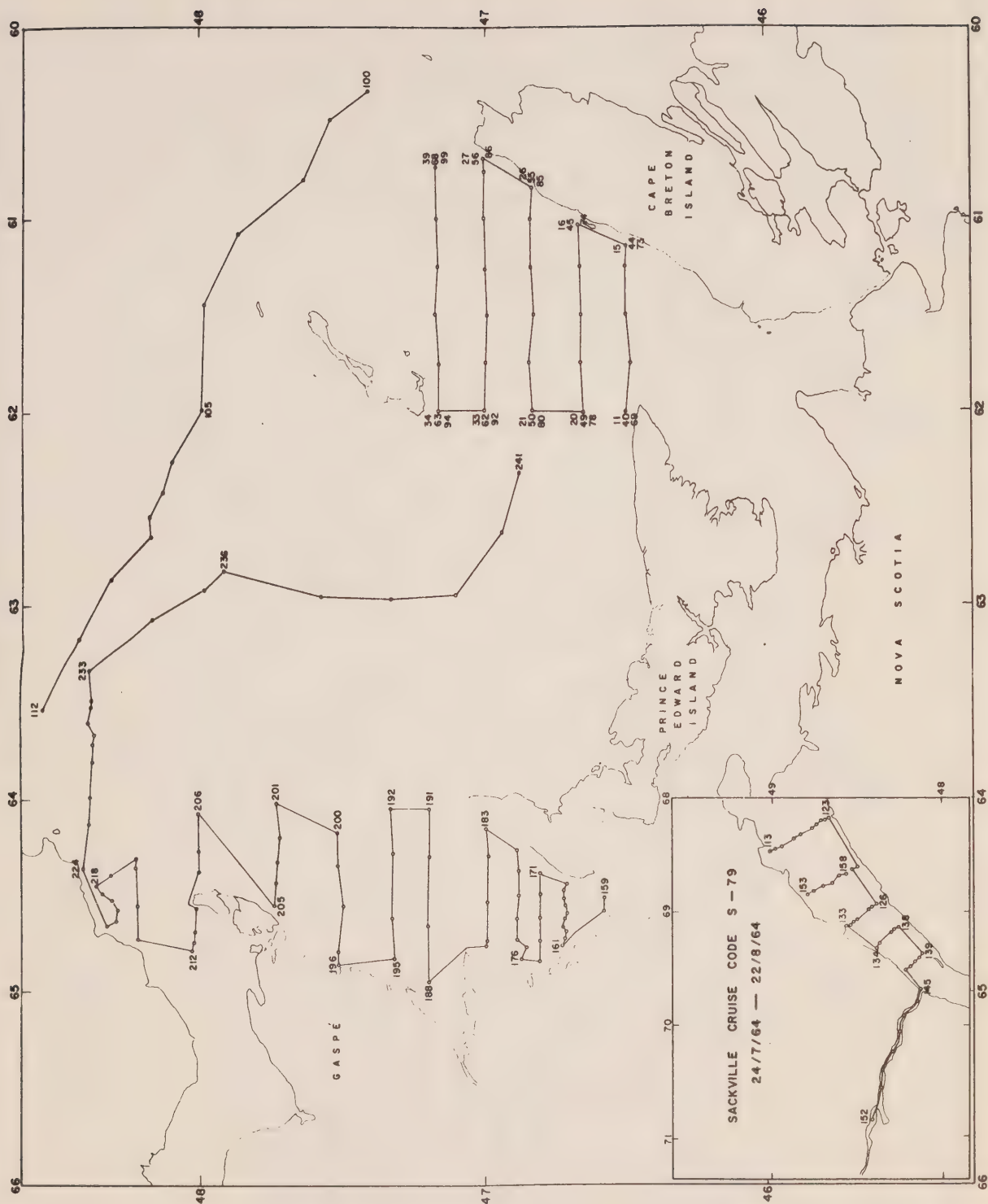


Figure 1

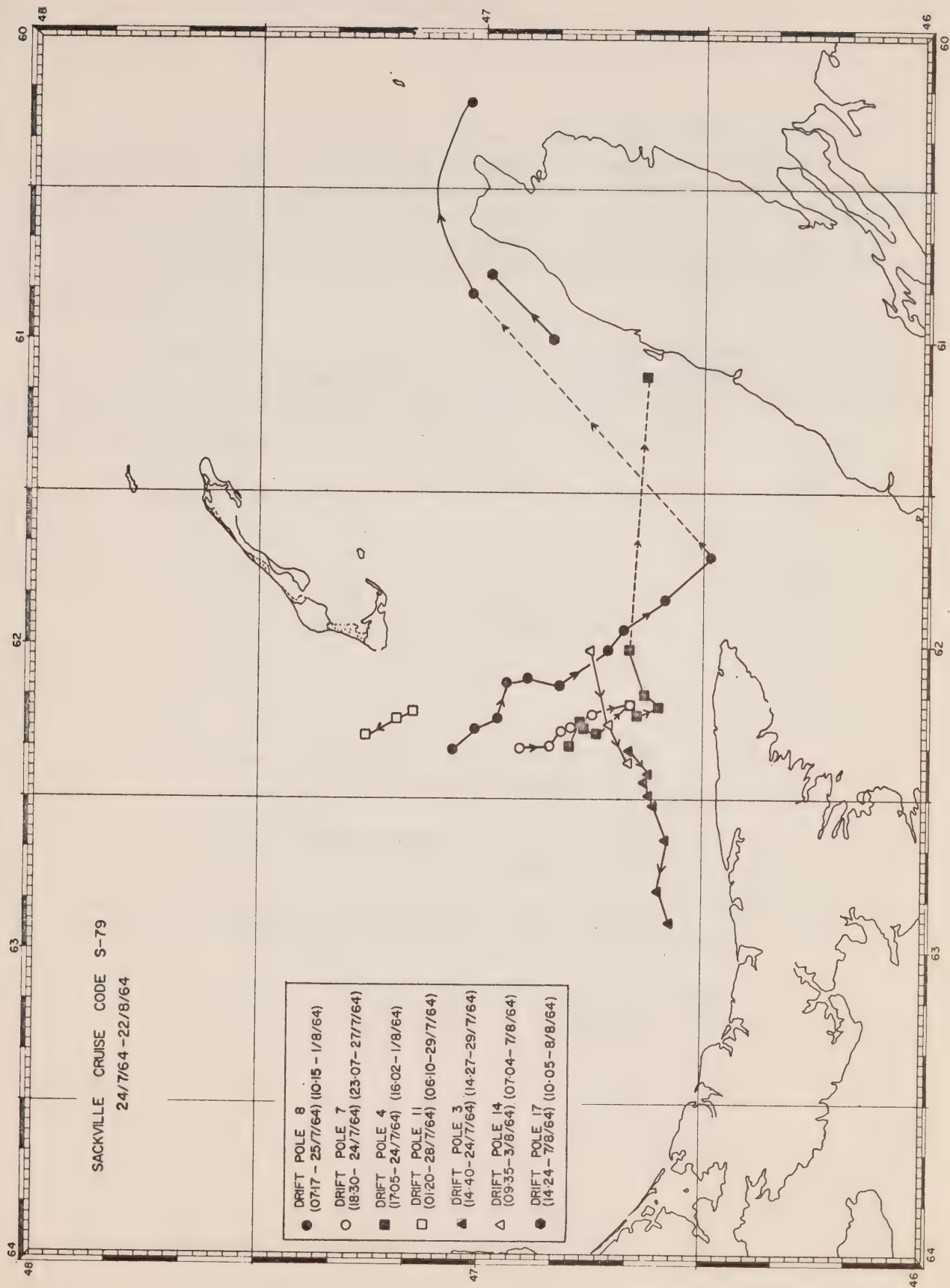


Figure 2 Tracks of drift drogues located in layer above thermocline

INTRODUCTION

The cruise was divided into two parts. The purpose of the first part was to study the non-tidal water movements in the southeastern portion of the Gulf of St. Lawrence. To do this parachute drogues attached to radar drift poles and transponding drift buoys were used. A series of oceanographic stations were occupied in the area, and the data from these stations are being used to calculate approximate horizontal and vertical velocities in the region. These stations were occupied three times during this part of the cruise.

The second part of the cruise was spent taking geological samples from the bottom of the St. Lawrence and Saguenay Rivers. A bottom temperature and salinity were recorded with each geological sample taken. Eight oceanographic stations were occupied in the Saguenay River.

EXTRACT OF CRUISE LOG

Part 1 - Phase 1 : Depart Halifax July 23, 1964
 Arrive Sydney July 30, 1964

Phase 2 : Depart Sydney July 31, 1964
 Arrive Sydney August 8, 1964

Part 2 - Phase 3 : Depart Sydney August 10, 1964
 Arrive Charlottetown, August 17, 1964

Phase 4 : Depart Charlottetown, August 18, 1964
 Arrive Halifax August 23, 1964.

OBSERVATION PROCEDURES

Oceanographic samples were taken at all stations during Part 1 from surface to bottom at standard depths plus additional samples at 5 and 15 metres. All stations were occupied three times with a bottom grab sample taken once at each station. Seventeen drift buoys with parachute drogues attached were released. For five days these were tracked by radar, individually identified and plotted. Two transponding drift buoys were released during this time. The parachute drogues were located at three different depths; just above and below the thermocline, and close to the bottom.

During Part 2 of the cruise five cross sections of the St. Lawrence River were made. Bottom samples were taken using a modified Van Veen grab. Bottom temperatures and salinities were taken with each grab. Eight oceanographic stations were occupied in the Saguenay River, standard depths were observed at these stations.

Sample reversing bottles were of the Knudsen type, coupled with reversing thermometers of the Richter and Wiese or Yoshino type. All thermometers were read by two observers.

LABORATORY PROCEDURE

Salinities were processed ashore on a National Institute of Oceanography conductivity bridge, temperatures and depths were processed and double checked.

BATHYTHERMOGRAPH DATA

A total of 109 BT observations was taken during the cruise to a maximum depth of 275 metres. A surface temperature was taken with each BT observation.

Bathythermograph records were processed at the bathythermograph centre of the Bedford Institute of Oceanography.

SUMMARY OF OBSERVATIONS

<u>Type</u>	<u>Number</u>
Sediment samples	148
Salinity samples	936
Oxygen determinations	204
Bathythermographs	109
Temperatures	857
Photographic stations	30

PERSONNEL

At Sea:

Part 1: Phase 1 & 2:	B. L. Blackford	- In Charge
	J. R. Chevrier	
	G. B. Taylor	
	T. A. Grant	
	G. Drapeau	
	R. J. Lahey	
	Y. W. Tsang	
Part 2: Phase 3:	D. H. Loring	- In Charge
	R. W. Trites	
	G. P. Cant	
	T. A. Holler	
	R. J. Lahey	
	G. Vilks	
	N. Fowler	
	T. Dauphinee	
	G. Sterebury	
	G. Drapeau	

Phase 4:	D.H. Loring	- In Charge
	G.P. Cant	
	D.L. Peer	
	T.A. Holler	
	P. Christie	
	R.J. Lahey	
	G. Vilks	
	N. Fowler	

Sgt. J. L. MacLauchlan, Port Meteorologist and Oceanographic
Inspector, RCAF.

Data Analyses

Physical Oceanography	G.B. Taylor
	J.R. Chevrier
	T.A. Holler
Salinities	W. Young
Oxygens	R.J. Lahey
	Y.W. Tsang
B.T. Processing	T.A. Grant

SECTION II

Description of the machine-generated data record

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an "estimate of precision" for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** (σ) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under "GENERAL INFORMATION" in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an "**interpolation error estimate**" derived from the particular interpolation formula used. There are two purposes in stating the error estimates; **first**, to give an indication of the quality of the interpolated data; **second**, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T , S , O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the "measurement error estimate" comprises the "**combined measurement and interpolation error estimate**". It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

1 IDENT. CODE		2 LATITUDE (N=+)		3 LONGITUDE (W=+)		5 DATE		6 TIME		7 DEPTH		9 NO. DEPTHS OBS'D.		VESSEL	
COUNTRY INST.		DEG. MIN. 1/10		DEG. MIN. 1/10		YEAR MONTH DAY		HOURS G.M.T. 1/10		TO BOTTOM				ENTERED BY	
1 8												34 35			
10 WATER		11 WAVES I		12 WAVES II		13 WIND		14 BAROMETER		15 AIR TEMP.		16 WET BULB		17 W.W. CODE	
COLOUR TRANS.		Dw Dp Pw Hw		Dw Dp Pw Hw		DIR. FORCE				1/10		1/10		(SEPT. 62)	
24 QW DATA		23 CONSEC. NUMBER		22 CRUISE REFERENCE NUMBER		21 UNASSIGNED		20 HOURS AFTER H.W.		19 IS V		18 CLOUD TYPE		17 W.W. CODE	

6 TIME		7 DEPTH OF SAMPLE		8 TEMPERATURE		9 SALINITY		10 OXYGEN		13 PO ₄ - P		14 TOTAL - P		15 NO ₂ - N		16 NO ₃ - N		17 SIO ₃ - SI		18 P.H.		24 QW DATA	
HOURS G.M.T. 1/10		e		↓ e		↓ d/e		e		↓		↓		↓		↓		↓		↓		3	
1																						3	
2																						3	
3																						3	
4																						3	
5																						3	
6																						3	
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20																						3	
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46																						55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72	
																						80	

OBSERVED CARD

* COLUMN 1-24 AS ON MASTER *

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ_i = Standard deviation of the combined error estimates at standard oceanographic depth,
 ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $1/3 (V_{i_1} - V_{i_2})$
 γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) ww-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

(1) CRUISE REFER-
ENCE NUMBER:

Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC

(2) CONSECUTIVE
NUMBER:

Indicates the chronological order in which the stations were occupied.

(3) LATITUDE:

Indicate the position of the platform at the time of observation

(4) LONGITUDE:

(5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).

(6) YEAR:

(7) MONTH:

(8) DAY:

(9) HOUR:

The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).

If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.

(10) COUNTRY/
INSTITUTE:

The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.

(11) DEPTH:

The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".

(12) MAXIMUM

SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).

00 m - 50 m = 00

51 m - 150 m = 01

151 m - 250 m = 02

etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: A code based on the percentage of yellow (see table 2 and Note under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;
- NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.
- (16) WAVES 1
($d_w d_w P_w H_w$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_w d_w P_w H_w$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE
(WND-FCE): Beaufort notation (See Table 6).
- WIND SPEED
(WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO_4	(9) -P-	(10) NO_2	(11) NO_3	(12) SiO_3
					(13) pH.

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An **alphabetical character** following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 C1\%$, reported in:
 a. 1/100 parts per 1000, or
 b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places.

An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

(8) PO ₄	Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
(9) -P-	Total Phosphorus reported to hundredths of microgram-atoms per litre.
(10) NO ₂	Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
(11) NO ₃	Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
(12) SiO ₂	Silicate-Silicon reported to tenths of microgram-atoms per litre.
(13) pH	The pH value.

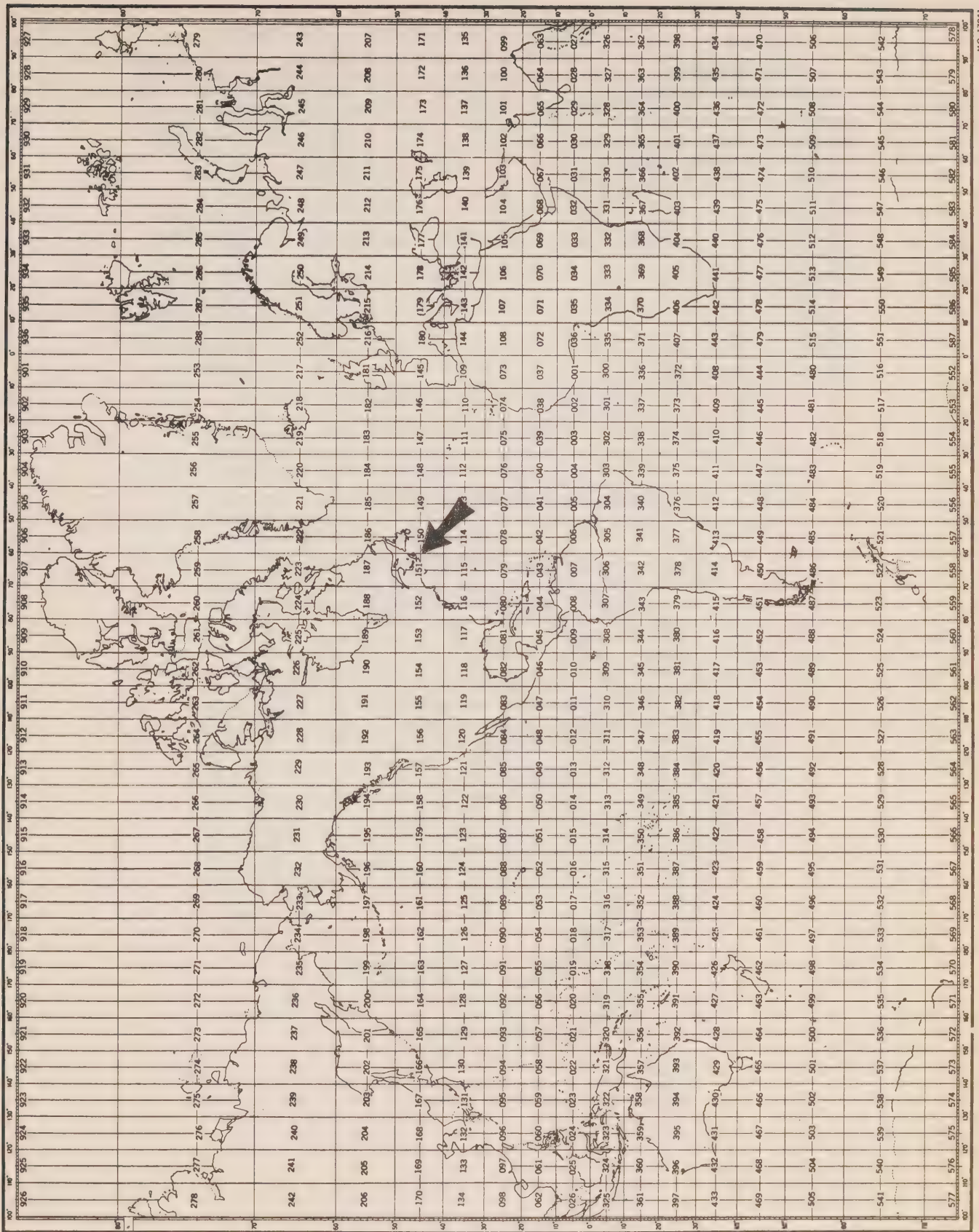
NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

(1) DEPTH	(2) TEMP	(3) SAL	(4) OXYGEN	(5) SGMT	(6) SOUND
(7) DELTA-D.	(8) POT-EN	(9) SVA.			

- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY:
- A. The reported salinity values are measured to three decimal places.
 - (i) the interpolation error estimate is less than twice the standard deviation of measurement
 - the interpolated value is reported to three decimal places (e.g., 30.139).
 - (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 - the interpolated value is reported to two decimal places, and followed by the **interpolation error estimate** (e.g., 29.23 C).
 - B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 - the interpolated value is reported to two decimal places, and followed by the **combined measurement and interpolation error estimate** (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "Introduction" to section II of the data record).

- (5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.
- (6) SOUND VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).
- (7) DELTA-D: The geo-potential anomaly as defined by:
- $$\Delta D = \int_0^P \delta \, dp$$
- ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).
- (8) POTENTIAL ENERGY ANOMALY: The Potential energy anomaly χ as defined by:
- $$\chi = 1/g \int_0^P p \delta \, dp = \int_0^Z \rho p \delta \, dz$$
- χ is expressed in units of 10^8 ergs/cm² and recorded to two decimal places (e.g., 116.44).
- (9) SPECIFIC VOLUME ANOMALY: The specific volume anomaly as defined by:
- $$\delta = \alpha - \alpha_{35.0.P}$$
- δ is expressed in ml/gr, and conventionally reported as $10^5 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).



MARS DEN SQUARE CHART

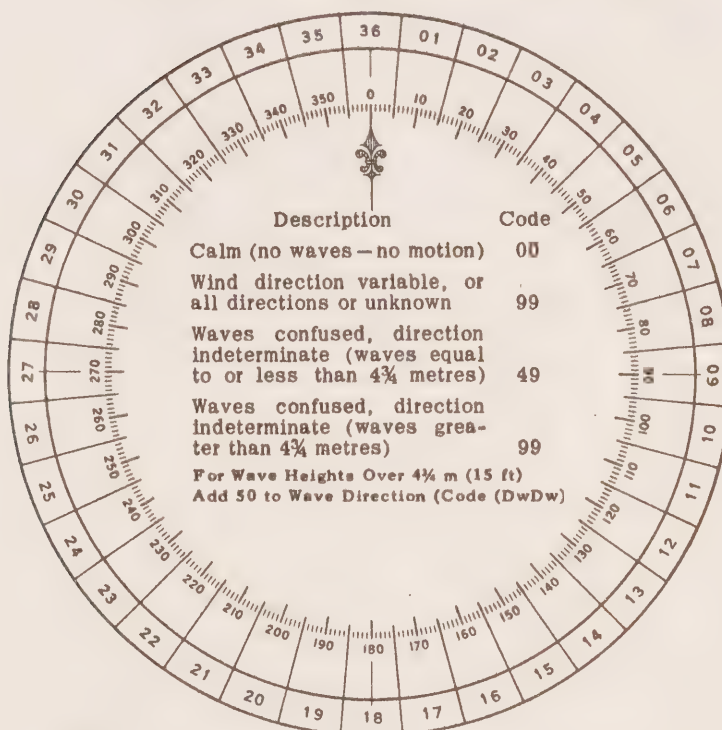
Table 1
CONVERSION
MINUTES TO $\frac{1}{10}$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (P_w)
(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (H_w)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code			Code
0	Less than ¼ m (1 ft)	Add 50 to Dw Dw	0 5 m (16 ft)
1	½ m (1½ ft)		1 5½ m (17½ ft)
2	1 m (3 ft)		2 6 m (19 ft)
3	1½ m (5 ft)		3 6½ m (21 ft)
4	2 m (6½ ft)		4 7 m (22½ ft)
5	2½ m (8 ft)		5 7½ m (24 ft)
6	3 m (9½ ft)		6 8 m (25½ ft)
7	3½ m (11 ft)		7 8½ m (27 ft)
8	4 m (13 ft)		8 9 m (29 ft)
9	4½ m (14 ft)		9 9½ m (30½ ft) or more
x	Height not determined		

Add
50
to
Dw Dw

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww			
No meteors except photometeors	00	Cloud development not observed or not observable	characteristic change of the state of sky during the past hour
	01	Clouds generally dissolving or becoming less developed	
	02	State of sky on the whole unchanged	
	03	Clouds generally forming or developing	
Haze, dust, sand or smoke	04	Visibility reduced by smoke, e.g. veidt or forest fires, industrial smoke or volcanic ashes	
	05	Haze	
	06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
	07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
	08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
	09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
	10	Mist	
	11	{ Patches of } shallow fog or ice fog at the station, whether on land or sea, not	
	12		{ More of less } deeper than about 2 metres on land or 10 metres at sea
	13	Lightning visible, no thunder heard	
	14	Precipitation within sight, not reaching the ground or the surface of the sea	
	15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station	
	16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station	
	17	Thunderstorm, but no precepitation at the time of observation	
	18	Squalls	{ at or within sight of the station during the preceding hour or at the time of observation
	19	Funnel clouds	
ww = 20 - 29			
	20	Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation	not falling as shower(s)
	21	Drizzle (not freezing) or snow grains	
	22	Rain (not freezing)	
	23	Snow	
	24	Rain and snow or ice pellets, type (a)	
	25	Freezing drizzle or freezing rain	
	26	Shower(s) of rain	
	27	Shower(s) of snow, or of rain and snow	
	28	Shower(s) of hail, or of rain and hail	
	29	Fog or ice fog	
	29	Thunderstorm (with or without precipitation)	
ww = 30 - 39			
	30	Duststorm, sandstorm, drifting or blowing snow	
	31	{ Slight or moderate duststorm or sandstorm	{ -has decreased during the preceding hour
	32		
	33	{ Severe duststorm or sandstorm	{ -no appreciable change during the preceding hour
	34		
	35	{ -has begun or has increased during the preceding hour	
	36		
	37	{ Slight or moderate blowing snow	{ -has decreased during the preceding hour
	38		
	39	{ Heavy drifting snow	{ -no appreciable change during the preceding hour
	40		
	41	{ Slight or moderate blowing snow	{ -has begun or has increased during the preceding hour
	42		
	43	{ Heavy blowing snow	{ generally low (below eye level)
	44		
	45	{ Slight or moderate blowing snow	{ generally high (above eye level)
	46		
	47	{ Heavy blowing snow	{ generally high (above eye level)
	48		
ww = 40 - 49			
	40	Fog or ice fog at the time of observation	
	41	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer	
	42	Fog or ice fog in patches	
	43	Fog or ice fog, sky visible	{ has become thinner during the preceding hour
	44	Fog or ice fog, sky invisible	
	45	Fog or ice fog, sky visible	{ no appreciable change during the preceding hour
	46	Fog or ice fog, sky invisible	
	47	Fog or ice fog, sky visible	{ has begun or has become thicker during the preceding hour
	48	Fog or ice fog, sky invisible	
	49	Fog, depositing rime, sky visible	
	49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

- | | | | |
|----|--|---|--------------------------------------|
| 50 | Drizzle, not freezing, intermittent | { | slight at time of observation |
| 51 | Drizzle, not freezing, continuous | | |
| 52 | Drizzle, not freezing, intermittent | { | moderate at time of observation |
| 53 | Drizzle, not freezing, continuous | | |
| 54 | Drizzle, not freezing, intermittent | { | heavy (dense) at time of observation |
| 55 | Drizzle, not freezing, continuous | | |
| 56 | Drizzle, freezing, slight | | |
| 57 | Drizzle, freezing, moderate or heavy (dense) | | |
| 58 | Drizzle and rain, slight | | |
| 59 | Drizzle and rain, moderate or heavy | | |

ww = 60 - 69 Rain

- | | | | |
|----|---|---|---------------------------------|
| 60 | Rain, not freezing, intermittent | { | slight at time of observation |
| 61 | Rain, not freezing, continuous | | |
| 62 | Rain, not freezing, intermittent | { | moderate at time of observation |
| 63 | Rain, not freezing, continuous | | |
| 64 | Rain, not freezing, intermittent | { | heavy at time of observation |
| 65 | Rain, not freezing, continuous | | |
| 66 | Rain, freezing, slight | | |
| 67 | Rain, freezing, moderate or heavy | | |
| 68 | Rain or drizzle and snow, slight | | |
| 69 | Rain or drizzle and snow, moderate or heavy | | |

70 - 79 Solid precipitation not in showers

- | | | | |
|----|---|---|---------------------------------|
| 70 | Intermittent fall of snow flakes | { | slight at time of observation |
| 71 | Continuous fall of snow flakes | | |
| 72 | Intermittent fall of snow flakes | { | moderate at time of observation |
| 73 | Continuous fall of snow flakes | | |
| 74 | Intermittent fall of snow flakes | { | heavy at time of observation |
| 75 | Continuous fall of snow flakes | | |
| 76 | Ice prisms (with or without fog) | | |
| 77 | Snow grains (with or without fog) | | |
| 78 | Isolated starlike snow crystals (with or without fog) | | |
| 79 | Ice pellets, type (a) | | |

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

- | | | | |
|----|--|---|---|
| 80 | Rain shower(s), slight | | |
| 81 | Rain shower(s), moderate or heavy | | |
| 82 | Rain shower(s), violent | | |
| 83 | Shower(s) of rain and snow mixed, slight | | |
| 84 | Shower(s) of rain and snow mixed, moderate or heavy | | |
| 85 | Snow shower(s), slight | | |
| 86 | Snow shower(s), moderate or heavy | | |
| 87 | Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed | { | - slight |
| 88 | | | |
| 89 | Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder | { | - moderate or heavy |
| 90 | | | |
| 91 | Slight rain at time of observation | { | - slight |
| 92 | Moderate or heavy rain at time of observation | | |
| 93 | Slight snow, or rain and snow mixed or hail at time of observation | { | thunderstorm during the preceding hour but not at time of observation |
| 94 | Moderate or heavy snow, or rain and snow mixed or hail at time of observation | | |
| 95 | Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation | { | - moderate or heavy |
| 96 | Thunderstorm, slight or moderate, with hail at time of observation | | |
| 97 | Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation | { | thunderstorm at time of observation |
| 98 | Thunderstorm, combined with duststorm or sandstorm at time of observation | | |
| 99 | Thunderstorm, heavy, with hail at time of observation | | |

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, dust storm, sand storm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{3}{4}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N.B.
04. Arctic Biological Station, St. Anne de Bellevue, P.Q.
05. Biological Station, St. John's, Nfld.
06. Station de Biologie Marine, Grande Riviere, P.Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N.S.
09. Pacific Naval Laboratory, Esquimalt, B.C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION III

Serial oceanographic data

GENERAL INFORMATION

<u>Institute</u>	Atlantic Oceanographic Group
<u>Observation Platform:</u>	CNAV "Sackville"
<u>Vessel's cruising speed:</u>	12 knots
<u>Total number of stations occupied:</u>	223
<u>Anemometer height above sea level:</u>	11 metres
<u>Barometer readings</u>	Aneroid Barometer (corrected)
<u>Air temperature</u>	Sling Psychrometer
<u>Wet bulb temperature</u>	Sling Psychrometer
<u>Surface sea water temperature</u>	Bucket sample (mercury in glass thermometer)

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature	0.03
Salinity	0.003

C-REF-NO 001	YR 1964	DEPTH 29	WAVES 1 07X0	AIR T 16.2	VIS 8
CONS. NO 001	MONTH 8	MXSAMPD 00	WAVES 2 07X1	WET B 14.5	STN 011
LAT 46-304N	DAY 02	NO.DPTH 6	WND-DIR 070	WW-CODE 03	
LON 61-598W	HR 23.1	W-COLOR	WND-SPD 02	CLD-TPE 3	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1020.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
236	0000	167 B	29235		2119	15057
236	0005	1676	29217	610 C	2117	15060
236	0010	1673	29214	620 C	2117	15060
236	0015	1633	29295	630 C	2132	15049
236	0020	1602	29299	600 C	2139	15040
236	0025	1370	29538	630 C	2206	14969

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1670 B	29235		2119	15057	0000	00000	6602
0010	1673	29214		2117	15060	0066	00003	6627
0020	1602	29299		2139	15040	0132	00013	6416

C-REF-NO 001	YR 1964	DEPTH 47	WAVES 1 08X1	AIR T 16.6	VIS 8
CONS. NO 002	MONTH 8	MXSAMPD 00	WAVES 2 08X1	WET B 14.9	STN 012
LAT 46-305N	DAY 03	NO.DPTH 8	WND-DIR 080	WW-CODE	
LON 61-445W	HR 00.5	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1020.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
008	0000	168 B	29751		2157	15066
008	0005	1628	29871		2177	15053
008	0010	1608	29911	620 C	2185	15048
008	0015	1606				
008	0020	0992 B	30092		2316	14842
008	0030	0556	31093	720 C	2454	14686
008	0040	0471	31269		2478	14655
008	0045	0389	31324	740 C	2490	14622

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1680 B	29751		2157	15066	0000	00000	6246
0010	1608	29911		2185	15048	0061	00003	5978
0020	0992 B	30092		2316	14842	0115	00011	4721
0030	0556	31093		2454	14686	0156	00021	3402

C-REF-NO 001	YR 1964	DEPTH 57	WAVES 1 09X1	AIR T 16.5	VIS 8
CONS. NO 003	MONTH 8	MXSAMPD 01	WAVES 2 09X1	WET B 14.0	STN 013
LAT 46-305N	DAY 03	NO.DPTH 9	WND-DIR 090	WW-CODE	
LON 61-300W	HR 01.8	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1020.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
020	0000	163 B	30100		2194	15055
020	0005	1634	30091		2193	15057
020	0010	1349	29989	620 C	2245	14965
020	0015	0700	31297		2453	14744
020	0020	0291	31445		2508	14577
020	0030	0104	31493	760 C	2525	14497
020	0040	0084	31540		2530	14490
020	0050	0064 B	31580		2534	14483
020	0055	0043	31647	750 C	2541	14475

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1630 B	30100		2194	15055	0000	00000	5883
0010	1349	29989		2245	14965	0057	00003	5404
0020	0291	31445		2508	14577	0098	00009	2888
0030	0104	31493		2525	14497	0126	00016	2727
0050	0064 B	31580		2534	14483	0180	00038	2639

C-REF-NO 001	YR 1964	DEPTH 57	WAVES 1 09X1	AIR T 15.7	VIS B
CONS. NO 004	MONTH 8	MXSAMPD 01	WAVES 2 09X1	WET B 13.8	STN 014
LAT 46-306N	DAY 03	NO.DPTH 9	WND-DIR 090	WW-CODE	
LON 61-147W	HR 03.0	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1020.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
032	0000	169 B	29726		2152	15069
032	0005	1611	29587		2159	15044
032	0010	1496	29961	630 C	2213	15013
032	0015	0946	30366		2345	14827
032	0020	0552 B	31043		2451	14682
032	0030	0134	31322	750 C	2510	14508
032	0040	0072	31527		2530	14484
032	0050	0044	31656		2541	14475
032	0054	0045	31691	720 C	2544	14477

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1690 B	29726		2152	15069	0000	00000	6286
0010	1496	29961		2213	15013	0060	00003	5710
0020	0552 B	31043		2451	14682	0106	00009	3435
0030	0134	31322		2510	14508	0138	00017	2874
0050	0044	31656		2541	14475	0193	00039	2571

C-REF-NO 001	YR 1964	DEPTH 33	WAVES 1 09X0	AIR T 16.1	VIS B
CONS. NO 005	MONTH 8	MXSAMPD 00	WAVES 2 09X1	WET B	STN 015
LAT 46-295N	DAY 03	NO.DPTH 6	WND-DIR 090	WW-CODE	
LON 61-077W	HR 03.8	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1014.4	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
040	0000	169 B	29242		2115	15063
040	0005	1714	29594		2137	15076
040	0010	1497	29774	610 C	2198	15011
040	0015	1324	29941		2246	14956
040	0020	0938	30265		2338	14824
040	0030	0797	30628	720 C	2387	14776

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1690 B	29242		2115	15063	0000	00000	6641
0010	1497	29774		2198	15011	0063	00003	5849
0020	0938	30265		2338	14824	0115	00011	4511
0030	0797	30628		2387	14776	0158	00021	4043

C-REF-NO 001	YR 1964	DEPTH 44	WAVES 1 09X0	AIR T 14.0	VIS 8
CONS. NO 006	MONTH 8	MXSAMPD 00	WAVES 2 09X1	WET B 11.5	STN 016
LAT 46-405N	DAY 03	NO.DPTH 7	WND-DIR 090	WW-CODE 02	
LON 61-016W	HR 05.1	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1014.2	CLD-AMT 0	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
054	0000	169 B	29483		2134	15066
054	0005	1717	29481		2128	15075
054	0010	1710	29440	600 C	2126	15074
054	0015	1620	29621		2160	15049
054	0020	1106	30112		2299	14883
054	0030	0647	30502	660 C	2397	14715
054	0039	0440	30720	680 C	2437	14634

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1690 B	29483		2134	15066	0000	00000	6464
0010	1710	29440		2126	15074	0065	00003	6542
0020	1106	30112		2299	14883	0122	00012	4887
0030	0647	30502		2397	14715	0167	00023	3949

C-REF-NO 001	YR 1964	DEPTH 88	WAVES 1 10X1	AIR T 16.5	VIS 8
CONS. NO 007	MONTH 8	MXSAMPD 01	WAVES 2 10X1	WET B 13.5	STN 017
LAT 46-408N	DAY 03	NO.DPTH 11	WND-DIR 100	WW-CODE 02	
LON 61-144W	HR 06.4	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 0	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
069	0000	169 B	29642		2146	15068
069	0005	1689	29634		2146	15069
069	0010	1629	29636	600 C	2159	15051
069	0015	1162	30718		2336	14910
069	0020	0700	31279		2452	14745
069	0030	0335	31474	750 C	2507	14598
069	0040	0074	31566		2533	14486
069	0050	0029	31642		2541	14468
069	0060	0014	31679		2545	14463
069	0075	0041	32296		2593	14487
069	0085	0057	32478	640 C	2607	14498

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1690 B	29642		2146	15068	0000	00000	6348
0010	1629	29636		2159	15051	0063	00003	6223
0020	0700	31279		2452	14745	0111	00010	3430
0030	0335	31474		2507	14598	0143	00018	2902
0050	0029	31642		2541	14468	0198	00040	2575
0075	0041	32296		2593	14486	0257	00077	2081

C-REF-NO 001	YR 1964	DEPTH 68	WAVES 1 10X0	AIR T 15.5	VIS 8
CONS. NO 008	MONTH 8	MXSAMPD 01	WAVES 2 10X1	WET B 13.5	STN 018
LAT 46-400N	DAY 03	NO.DPTH 10	WND-DIR 100	WW-CODE 02	
LON 61-300W	HR 08.8	W-COLOR	WND-SPD 03	CLD-TPE 4	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
092	0000	151 B	30444		2247	15021
092	0005	1508	30426		2246	15021
092	0010	0634 B	31177	750 C	2452	14716
092	0015	0484	31399		2487	14658
092	0020	0152	31592		2530	14518
092	0030	0022	31696	750 C	2546	14462
092	0040	-0014	31714		2549	14447
092	0050	-0019	31734		2550	14447
092	0060	-0013	31862		2560	14453
092	0065	-0004	31960	680 C	2568	14460

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1510 B	30444		2247	15021	0000	00000	5382
0010	0634 B	31177		2452	14716	0044	00002	3426
0020	0152	31592		2530	14518	0075	00006	2680
0030	0022	31696		2546	14462	0101	00013	2532
0050	-0019	31734		2550	14447	0152	00034	2484

C-REF-NO 001 YR 1964 DEPTH 58 WAVES 1 13X0 AIR T 16.0 VIS 8
 CONS. NO 009 MONTH 8 MXSAMPD 01 WAVES 2 13X0 WET B 13.5 STN 019
 LAT 46-402N DAY 03 NO.DPTH 9 WND-DIR 130 WW-CODE 03
 LON 61-451W HR 10.2 W-COLOR WND-SPD 01 CLD-TPE 6
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1019.2 CLD-AMT 4 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
106	0000	162 B	29744		2169	15048
106	0005	1626	29719		2166	15050
106	0010	1622	29722	610 C	2167	15050
106	0015	1393	30189		2251	14983
106	0020	0913	31187		2414	14826
106	0030	0607	31304	720 C	2465	14710
106	0040	0110	31573		2531	14502
106	0050	0102	31584		2532	14500
106	0055	0082	31611	720 C	2536	14492

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1620 B	29744		2169	15048	0000	00000	6123
0010	1622	29722		2167	15050	0061	00003	6146
0020	0913	31187		2414	14826	0111	00010	3789
0030	0607	31304		2465	14710	0147	00019	3301
0050	0102	31584		2532	14500	0207	00043	2656

C-REF-NO 001	YR 1964	DEPTH 54	WAVES 1 06X1	AIR T 16.1	VIS B
CONS. NO 010	MONTH 8	MXSAMPD 00	WAVES 2 06X1	WET B 14.2	STN 020
LAT 46-400N	DAY 03	NO.DPTH 8	WND-DIR 060	WW-CODE	
LON 62-005W	HR 11.4	W-COLOR	WND-SPD 04	CLD-TPE 4	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1020.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
117	0000	166 B	29115		2113	15053
117	0005	1672	29120		2110	15057
117	0010	1669	29106	610 C	2110	15057
117	0015	1637	29161		2121	15049
117	0020	1373	29573		2208	14969
117	0030	0304	31148	760 C	2484	14580
117	0040	0072	31549		2531	14485
117	0050	0075 B	31584	730 C	2534	14488

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1660 B	29115		2113	15053	0000	00000	6669
0010	1669	29106		2110	15057	0067	00003	6697
0020	1373	29573		2208	14969	0129	00013	5757
0030	0304	31148		2484	14580	0174	00023	3124
0050	0075 B	31584		2534	14488	0232	00047	2642

C-REF-NO 001	YR 1964	DEPTH 73	WAVES 1 07X1	AIR T 18.0	VIS 8
CONS. NO 011	MONTH 8	MXSAMPD 01	WAVES 2 07X1	WET B 14.7	STN 021
LAT 46-500N	DAY 03	NO.DPTH 10	WND-DIR 070	WW-CODE 02	
LON 62-009W	HR 13.1	W-COLOR	WND-SPD 04	CLD-TPE 4	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1020.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
136	0000	164 B	29457		2143	15051
136	0005	1644	29455		2142	15053
136	0010	1606	29699	620 C	2169	15045
136	0015	1463	30130		2233	15005
136	0020	0831	31117		2421	14794
136	0030	0516	31411	710 C	2484	14674
136	0040	0037	31692		2545	14471
136	0050	0016	31726	700 C	2548	14463
136	0059	0014	31708		2547	14463
136	0069	0015	31717	690 C	2548	14466

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1640 B	29457		2143	15051	0000	00000	6375
0010	1606	29699		2169	15045	0063	00003	6129
0020	0831	31117		2421	14794	0112	00010	3724
0030	0516	31411		2484	14674	0147	00019	3121
0050	0016	31726		2548	14463	0203	00041	2505

C-REF-NO 001 YR 1964 DEPTH 71 WAVES 1 07X0 AIR T 17.5 VIS 8
 CONS. NO 012 MONTH 8 MXSAMPD 01 WAVES 2 07X1 WET B 15.0 STN 022
 LAT 46-500N DAY 03 NO.DPTH 10 WND-DIR 070 WW-CODE
 LON 61-450W HR 14.6 W-COLOR WND-SPD 04 CLD-TPE 2
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1020.0 CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0000	157 B	30245		2219	15038
149	0005	1560	30281		2224	15036
149	0010	1490	30493	610 C	2255	15017
149	0015	1460	30559		2266	15009
149	0020	0657	31247		2455	14727
149	0030	0179	31678	720 C	2535	14533
149	0040	-0010	31710		2548	14449
149	0050	-0011	31708	700 C	2548	14450
149	0060	-0012	31713		2548	14452
149	0070	-0011	31713	690 C	2548	14454

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1570 B	30245		2219	15038	0000	00000	5651
0010	1490	30493		2255	15017	0055	00003	5308
0020	0657	31247		2455	14727	0099	00009	3402
0030	0179	31678		2535	14533	0129	00017	2631
0050	-0011	31708		2548	14450	0181	00038	2507

C-REF-NO 001	YR 1964	DEPTH	54	WAVES 1 06X1	AIR T 17.0	VIS 8
CONS. NO 013	MONTH 8	MXSAMPD	00	WAVES 2 06X1	WET B 15.1	STN 023
LAT 46-497N	DAY 03	NO.DPTH	8	WND-DIR 060	WW-CODE 02	
LON 61-300W	HR 16.2	W-COLOR		WND-SPD 06	CLD-TPE 4	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1019.5	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
165	0000	160 B	30139		2204	15046
165	0005	1601	30116		2202	15047
165	0010	1586	30151	600 C	2208	15044
165	0015	1522	30451		2245	15028
165	0020	0924 B	30959		2395	14827
165	0030	0188 B	31578	780 C	2527	14535
165	0040	0008	31696		2546	14457
165	0050	-0008	31787	700 C	2554	14453

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1600 B	30139		2204	15046	0000	00000	5791
0010	1586	30151		2208	15044	0058	00003	5756
0020	0924 B	30959		2395	14827	0107	00010	3974
0030	0188 B	31578		2527	14535	0140	00018	2713
0050	-0008	31787		2554	14453	0192	00039	2448

C-REF-NO 001	YR 1964	DEPTH 58	WAVES 1 05X1	AIR T 17.0	VIS B
CONS. NO 014	MONTH 8	MXSAMPD 01	WAVES 2 05X2	WET B 14.0	STN 024
LAT 46-500N	DAY 03	NO.DPTH 9	WND-DIR 050	WW-CODE 03	
LON 61-151W	HR 17.7	W-COLOR	WND-SPD 07	CLD-TPE 4	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.9	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
180	0000	165 B	29944		2178	15060
180	0005	1651	29446		2140	15055
180	0010	1518	30225	610 C	2228	15023
180	0015	0394	31447		2499	14621
180	0020	0120	31534		2527	14503
180	0030	0032	31599	760 C	2537	14465
180	0040	0008	31668		2544	14457
180	0050	-0012	31701		2547	14450
180	0055	-0015	31704	730 C	2548	14449

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1650 B	29944		2178	15060	0000	00000	6040
0010	1518	30225		2228	15023	0058	00003	5561
0020	0120	31534		2527	14503	0100	00008	2705
0030	0032	31599		2537	14465	0126	00015	2610
0050	-0012	31701		2547	14450	0178	00036	2512

C-REF-NO 001	YR 1964	DEPTH 131	WAVES 1 09X2	AIR T 17.3	VIS 8
CONS. NO 015	MONTH 8	MXSAMPD 01	WAVES 2 09X3	WET B 13.0	STN 025
LAT 46-504N	DAY 03	NO.DPTH 12	WND-DIR 050	WW-CODE	
LON 61-000W	HR 19.1	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
194	0000	172 B	29721		2145	15078
194	0005	1728	29691		2141	15081
194	0010	1716	29707	600 C	2145	15079
194	0015	1349	30104		2254	14967
194	0020	0744	30551		2389	14753
194	0030	0433	31389	770 C	2491	14639
194	0040	0110	31489		2524	14501
194	0050	0034	31638		2540	14470
194	0060	0004	31705		2547	14459
194	0074	0039	32286	670 C	2592	14485
194	0099	0080	32715		2624	14514
194	0124	0102	32890	610 C	2637	14530

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1720 B	29721		2145	15078	0000	00000	6356
0010	1716	29707		2145	15079	0064	00003	6360
0020	0744	30551		2389	14753	0116	00011	4030
0030	0433	31389		2491	14639	0151	00019	3054
0050	0034	31638		2540	14470	0208	00042	2581
0075	0041	32313		2594	14487	0267	00079	2068
0100	0083	3281 I		2632	14517	0314	00121	1713
0125	0102	3288 B		2637	14531	0357	00170	1667

C-REF-NO 001	YR 1964	DEPTH 37	WAVES 1 09X2	AIR T 16.5	VIS 8
CONS. NO 016	MONTH 8	MXSAMPD 00	WAVES 2 09X2	WET B 12.5	STN 026
LAT 46-500N	DAY 03	NO.DPTH 6	WND-DIR 050	WW-CODE	
LON 60-516W	HR 20.6	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
208	0000	167 B	29631		2150	15062
208	0005	1676	29604		2146	15064
208	0010	1676	29612	610 C	2147	15065
208	0015	1496 B	29821		2202	15012
208	0020	0890 B	30225		2342	14805
208	0030	0463	30708	680 C	2434	14642

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1670 B	29631		2150	15062	0000	00000	6313
0010	1676	29612		2147	15065	0063	00003	6342
0020	0890 B	30225		2342	14805	0118	00011	4471
0030	0463	30708		2434	14642	0158	00021	3596

C-REF-NO 001	YR 1964	DEPTH 96	WAVES 1 09X1	AIR T 15.3	VIS 9
CONS. NO 017	MONTH 8	MXSAMPD 01	WAVES 2 09X2	WET B 12.3	STN 027
LAT 47-001N	DAY 03	NO.DPTH 10	WND-DIR 090	WW-CODE 01	
LON 60-411W	HR 22.0	W-COLOR	WND-SPD 06	CLD-TPE 2	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
223	0000	165 B	29714		2161	15057
223	0005	1658	29737		2160	15060
223	0010	1647	29707	590 C	2161	15057
223	0015	1287	30007		2258	14945
223	0020	0704 C	30351		2378	14734
223	0030	0467	30905	690 C	2449	14647
223	0040	0271	31259		2495	14569
223	0050	0220	31372	730 C	2508	14550
223	0060	0088	31668		2540	14497
223	0080	0056	32041	690 C	2572	14491

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1650 B	29714		2161	15057	0000	00000	6209
0010	1647	29707		2161	15057	0062	00003	6210
0020	0704 C	30351		2378	14734	0114	00011	4129
0030	0467	30905		2449	14647	0152	00020	3452
0050	0220	31372		2508	14550	0216	00046	2891
0075	0067 D	3192 F		2562	14493	0282	00087	2379

C-REF-NO 001 YR 1964 DEPTH 137 WAVES 1 09X1 AIR T 15.8 VIS 9
 CONS. NO 018 MONTH 8 MXSAMPD 01 WAVES 2 09X1 WET B 13.4 STN 028
 LAT 47-006N DAY 03 NO.DPTH 12 WND-DIR 090 WW-CODE 02
 LON 60-450W HR 22.7 W-COLOR WND-SPD 05 CLD-TPE 4
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1019.0 CLD-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
230	0000	170 B	29647		2144	15071
230	0005	1712	29652		2142	15076
230	0010	1714	29630	590 C	2140	15077
230	0015	1353	30082		2251	14968
230	0020	0709	30444		2385	14738
230	0030	0384	31243	740 C	2484	14616
230	0040	0139	31499		2523	14514
230	0050	0034	31653	750 C	2542	14470
230	0060	0000	31780		2553	14458
230	0075	0046	32359		2598	14490
230	0100	0073	32723	640 C	2625	14511
230	0135	0303	33861	450 C	2700	14634

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1700 B	29647		2144	15071	0000	00000	6366
0010	1714	29630		2140	15077	0064	00003	6412
0020	0709	30444		2385	14738	0117	00011	4066
0030	0384	31243		2484	14616	0153	00020	3119
0050	0034	31653		2542	14470	0210	00043	2569
0075	0046	32359		2598	14490	0268	00079	2035
0100	0073	32723		2625	14511	0316	00121	1772
0125	0237 D	3360 I		2685	14600	0353	00164	1217

C-REF-NO 001	YR 1964	DEPTH 82	WAVES 1 09X1	AIR T 15.5	VIS 8
CONS. NO 019	MONTH 8	MXSAMPD 01	WAVES 2 09X1	WET B 13.0	STN 029
LAT 47-000N	DAY 04	NO.DPTH 11	WND-DIR 090	WW-CODE 02	
LON 61-010W	HR 00.1	W-COLOR	WND-SPD 05	CLD-TPE 8	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
004	0000	163 B	29739		2167	15051
004	0005	1642	29715		2162	15055
004	0010	1637	29760	610 C	2167	15055
004	0015	1449	30336		2251	15003
004	0020	0635	31451		2473	14721
004	0030	0065	31763	740 C	2549	14483
004	0039	0038	32112		2578	14477
004	0049	0019	32342		2598	14473
004	0059	0030	32455		2606	14481
004	0074	0032	32509		2610	14485
004	0079	0032	32506	720 C	2610	14486

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1630 B	29739		2167	15051	0000	00000	6148
0010	1637	29760		2167	15055	0062	00003	6150
0020	0635	31451		2473	14721	0109	00010	3223
0030	0065	31763		2549	14483	0137	00017	2501
0050	0020	32357		2599	14473	0183	00035	2025
0075	0033	32512		2611	14486	0233	00067	1912

C-REF-NO 001	YR 1964	DEPTH 47	WAVES 1 09X1	AIR T 15.0	VIS 8
CONS. NO 020	MONTH 8	MXSAMPD 00	WAVES 2 09X1	WET B 12.8	STN 030
LAT 47-000N	DAY 04	NO.DPTH 8	WND-DIR 090	WW-CODE 02	
LON 61-150W	HR 01.2	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
016	0000	150 B	30379		2244	15017
016	0005	1504	30363		2242	15019
016	0010	1504	30364	620 C	2242	15020
016	0015	1487	30363		2246	15016
016	0020	0330	31515		2511	14595
016	0030	0043	31795	740 C	2553	14473
016	0040	0038	32014		2570	14475
016	0045	0034	32024	660 C	2571	14475

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1500 B	30379		2244	15017	0000	00000	5409
0010	1504	30364		2242	15020	0054	00003	5430
0020	0330	31515		2511	14595	0096	00009	2867
0030	0043	31795		2553	14473	0123	00015	2466

C-REF-NO 001	YR 1964	DEPTH 32	WAVES 1 09X1	AIR T 14.7	VIS 8
CONS. NO 021	MONTH 8	MXSAMPD 00	WAVES 2 09X1	WET B 12.9	STN 031
LAT 47-000N	DAY 04	NO.DPTH 6	WND-DIR 090	WW-CODE 02	
LON 61-318W	HR 02.5	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
028	0000	146 B	30317		2248	15004
028	0005	1463	30300		2246	15005
028	0010	1465	30306	630 C	2246	15007
028	0015	1368	30396		2272	14977
028	0020	0478	31483		2494	14657
028	0030	0204	31740	700 C	2538	14545

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1460 B	30317		2248	15004	0000	00000	5374
0010	1465	30306		2246	15007	0054	00003	5395
0020	0478	31483		2494	14657	0096	00009	3027
0030	0204	31740		2538	14545	0125	00016	2601

C-REF-NO 001	YR 1964	DEPTH 35	WAVES 1 09X1	AIR T 14.5	VIS B
CONS. NO 022	MONTH 8	MXSAMPD 00	WAVES 2 09X2	WET B 13.5	STN 032
LAT 47-000N	DAY 04	NO.DPTH 6	WND-DIR 090	WW-CODE 02	
LON 61-451W	HR 03.5	W-COLOR	WND-SPD 06	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
037	0000	150 B	30305		2238	15017
037	0005	1511	30280		2234	15021
037	0010	1512	30282	620 C	2234	15022
037	0015	1506	30279		2235	15021
037	0020	0644 B	31203		2453	14722
037	0030	0387	31529	700 C	2507	14621

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1500 B	30305		2238	15017	0000	00000	5463
0010	1512	30282		2234	15022	0055	00003	5507
0020	0644 B	31203		2453	14722	0100.	00009	3419
0030	0387	31529		2507	14621	0132	00017	2906

C-REF-NO 001	YR 1964	DEPTH 44	WAVES 1 07X2	AIR T 14.5	VIS 8
CONS. NO 023	MONTH 8	MXSAMPD 00	WAVES 2 07X3	WET B 13.2	STN 033
LAT 46-581N	DAY 04	NO.DPTH 7	WND-DIR 070	WW-CODE 02	
LON 62-024W	HR 04.6	W-COLOR	WND-SPD 07	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.8	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
049	0000	156 B	30062		2207	15033
049	0005	1575	30044		2202	15038
049	0010	1574	30051	620 C	2203	15039
049	0015	1492	30283		2238	15016
049	0020	0965	30985		2390	14843
049	0030	0548 B	31303	670 C	2472	14686
049	0040	0125	31632	670 C	2535	14510

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1560 B	30062		2207	15033	0000	00000	5764
0010	1574	30051		2203	15039	0058	00003	5804
0020	0965	30985		2390	14843	0107	00010	4017
0030	0548 B	31303		2472	14686	0144	00019	3236

C-REF-NO 001	YR 1964	DEPTH 32	WAVES 1 07X2	AIR T 14.6	VIS 8
CONS. NO 024	MONTH 8	MXSAMPD 00	WAVES 2 07X2	WET B 13.5	STN 034
LAT 47-093N	DAY 04	NO.DPTH 6	WND-DIR 070	WW-CODE	
LON 62-005W	HR 05.8	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.2	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
061	0000	149 B	30269		2238	15013
061	0005	1499	30256		2235	15016
061	0010	1498	30251	620 C	2235	15017
061	0015	1488	30246		2236	15014
061	0020	1212 B	30312		2296	14923
061	0030	0866	30971	640 C	2404	14807

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1490 B	30269		2238	15013	0000	00000	5470
0010	1498	30251		2235	15017	0055	00003	5501
0020	1212 B	30312		2296	14923	0107	00011	4919
0030	0866	30971		2404	14807	0151	00022	3883

C-REF-NO 001	YR 1964	DEPTH 24	WAVES 1 07X1	AIR T 14.5	VIS 8
CONS. NO 025	MONTH 8	MXSAMPD 00	WAVES 2 07X2	WET B 13.3	STN 035
LAT 47-104N	DAY 04	NO.DPTH 5	WND-DIR 070	WW-CODE	
LON 61-446W	HR 07.2	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.3	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	144 B	30210		2244	14996
074	0005	1440	30189	630 C	2242	14996
074	0010	1437	30183		2242	14996
074	0015	1438	30203		2243	14998
074	0020	1432	30198	630 C	2244	14996

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1440 B	30210		2244	14996	0000	00000	5414
0010	1437	30183		2242	14996	0054	00003	5430
0020	1432	30198		2244	14996	0109	00011	5411

C-REF-NO 001	YR 1964	DEPTH	25	WAVES 1 08X3	AIR T 14.3	VIS B
CONS. NO 026	MONTH 8	MXSAMPD	00	WAVES 2 08X3	WET B 13.0	STN 036
LAT 47-108N	DAY 04	NO.DPTH	5	WND-DIR 080	WW-CODE 02	
LON 61-304W	HR 08.4	W-COLOR		WND-SPD 10	CLD-TPE 4	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1017.3	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
087	0000	145 B	30374		2254	15001
087	0005	1460	30365		2251	15005
087	0010	1460	30369	620 C	2252	15006
087	0015	1458	30381		2253	15006
087	0020	1288	30489	660 C	2295	14952

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1450 B	30374		2254	15001	0000	00000	5313
0010	1460	30369		2252	15006	0053	00003	5339
0020	1288	30489		2295	14952	0105	00011	4925

C-REF-NO 001 YR 1964 DEPTH 42 WAVES 1 08X4 AIR T 14.6 VIS B
 CONS. NO 027 MONTH 8 MXSAMPD 00 WAVES 2 08X5 WET B 13.1 STN 037
 LAT 47-102N DAY 04 NO.DPTH 7 WND-DIR 080 WW-CODE 02
 LON 61-156W HR 09.8 W-COLOR WND-SPD 12 CLD-TPE 4
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1017.0 CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
100	0000	148 B	30344		2246	15011
100	0005	1473	30332		2246	15009
100	0010	1472	30338	620 C	2247	15010
100	0015	1472	30335		2247	15010
100	0020	0726	31426		2460	14757
100	0030	0128	31807	740 C	2549	14512
100	0040	0072	31888	680 C	2559	14489

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1480 B	30344		2246	15011	0000	00000	5394
0010	1472	30338		2247	15010	0054	00003	5385
0020	0726	31426		2460	14757	0098	00009	3353
0030	0128	31807		2549	14512	0127	00016	2502

C-REF-NO 001	YR 1964	DEPTH 87	WAVES 1 09X3	AIR T 15.4	VIS 8
CONS. NO 028	MONTH 8	MXSAMPD 01	WAVES 2 09X3	WET B 13.2	STN 038
LAT 47-103N	DAY 04	NO.DPTH 11	WND-DIR 090	WW-CODE 02	
LON 61-005W	HR 11.1	W-COLOR	WND-SPD 12	CLD-TPE 8	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
115	0000	154 B	30245		2225	15029
115	0005	1533	30229		2226	15027
115	0010	1532	30224	610 C	2225	15027
115	0014	1526	30249		2229	15027
115	0019	0770	31223		2438	14772
115	0029	0216 B	31799	790 C	2542	14551
115	0038	0032	32022		2571	14473
115	0048	0029	32292		2593	14477
115	0058	0034	32322		2595	14481
115	0072	0035	32431		2604	14485
115	0082	0035	32451	680 C	2606	14487

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1540 B	30245		2225	15029	0000	00000	5589
0010	1532	30224		2225	15027	0056	00003	5590
0020	0678 E	3133 G		2458	14737	0101	00009	3365
0030	0184 B	3183 B		2547	14537	0131	00017	2519
0050	0030	3231 C		2594	14477	0177	00035	2069
0075	0036	3242 D		2603	14486	0228	00068	1982

C-REF-NO 001 YR 1964 DEPTH 124 WAVES 1 06X3 AIR T 15.5 VIS 8
 CONS. NO 029 MONTH 8 MXSAMPD 01 WAVES 2 06X3 WET B 13.1 STN 039
 LAT 47-106N DAY 04 NO.DPTH 12 WND-DIR 060 WW-CODE 02
 LON 60-433W HR 12.6 W-COLOR WND-SPD 12 CLD-TPE 1
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1016.5 CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
129	0000	162 B	29838		2177	15049
129	0005	1632	29804		2171	15053
129	0010	1630	29816	600 C	2173	15053
129	0014	1568	30050		2204	15037
129	0019	1220	30700		2324	14931
129	0029	0170 B	31660	730 C	2534	14528
129	0038	0038	31972		2567	14475
129	0048	0042	32144		2581	14480
129	0058	0032	32420		2603	14481
129	0072	0027	32633	730 C	2621	14484
129	0096	0066	32968		2646	14511
129	0120	0075	33031	670 C	2650	14520

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1620 B	29838		2177	15049	0000	00000	6054
0010	1630	29816		2173	15053	0061	00003	6094
0020	1104 G	30821		2354	14892	0113	00011	4360
0030	0133 D	3171 B		2541	14513	0148	00019	2578
0050	0040	3220 B		2585	14481	0196	00038	2155
0075	0031	3268 B		2625	14487	0245	00069	1781
0100	0055 C	3296 G		2646	14506	0288	00107	1582

C-REF-NO 001	YR 1964	DEPTH 21	WAVES 1 06X4	AIR T 16.9	VIS 8
CONS. NO 030	MONTH 8	MXSAMPD 00	WAVES 2 06X4	WET B 14.5	STN 040
LAT 46-300N	DAY 04	NO.DPTH 5	WND-DIR 060	WW-CODE 03	
LON 62-002W	HR 19.0	W-COLOR	WND-SPD 07	CLD-TPE 3	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1011.5	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
192	0000	156 B	29583		2170	15027
192	0005	1552	29582		2172	15025
192	0010	0988	30389	650 C	2340	14842
192	0015	0717	30905		2420	14746
192	0020	0632	31050	680 C	2442	14715

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1560 B	29583		2170	15027	0000	00000	6115
0010	0988	30389		2340	14842	0053	00002	4493
0020	0632	31050		2442	14715	0093	00008	3519

C-REF-NO 001 YR 1964 DEPTH 37 WAVES 1 06X3 AIR T 16.0 VIS 8
 CONS. NO 031 MONTH 8 MXSAMPD 00 WAVES 2 06X3 WET B 15.1 STN 041
 LAT 46-295N DAY 04 NO.DPTH 7 WND-DIR 060 WW-CODE 03
 LON 61-455W HR 20.4 W-COLOR WND-SPD 07 CLD-TPE
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1011.5 CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
206	0000	160 B	30090		2200	15046
206	0010	1578	30152	620 C	2210	15041
206	0015	1561	30233		2220	15038
206	0020	1558	30250	710 C	2222	15038
206	0025	0639 B	30507		2399	14711
206	0030	0412 B	31182		2477	14627
206	0035	0296	31394	730 C	2504	14581

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1600 B	30090		2200	15046	0000	00000	5827
0010	1578	30152		2210	15041	0058	00003	5738
0020	1558	30250		2222	15038	0115	00012	5627
0030	0412 B	31182		2477	14627	0159	00022	3191

C-REF-NO 001	YR 1964	DEPTH 56	WAVES 1 04X3	AIR T 15.9	VIS 8
CONS. NO 032	MONTH 8	MXSAMPD 01	WAVES 2 04X3	WET B 14.6	STN 042
LAT 46-300N	DAY 04	NO.DPTH 8	WND-DIR 040	WW-CODE	
LON 61-300W	HR 22.1	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1011.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
223	0000	164 B	29945		2180	15056
223	0010	1616	29921	600 C	2184	15050
223	0015	0634	31358		2466	14719
223	0020	0147	31508		2524	14515
223	0025	0098	31537		2529	14494
223	0030	0085	31555	740 C	2531	14489
223	0040	0046	31616		2538	14474
223	0055	0026 I	31692	720 C	2545	14468

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1640 B	29945		2180	15056	0000	00000	6018
0010	1616	29921		2184	15050	0060	00003	5987
0020	0147	31508		2524	14515	0104	00009	2741
0030	0085	31555		2531	14489	0131	00016	2670
0050	0033 F	31663		2542	14470	0184	00037	2561

C-REF-NO 001	YR 1964	DEPTH 52	WAVES 1 04X3	AIR T 15.8	VIS 8
CONS. NO 033	MONTH 8	MXSAMPD 00	WAVES 2 04X3	WET B 14.0	STN 043
LAT 46-301N	DAY 04	NO.DPTH 8	WND-DIR 040	WW-CODE 61	
LON 61-152W	HR 23.6	W-COLOR	WND-SPD 07	CLO-TPE 6	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1010.0	CLO-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
238	0000	173 B	29763		2146	15082
238	0010	1630	29727		2166	15052
238	0015	0842 B	30826	690 C	2396	14794
238	0020	0526	31061		2455	14672
238	0025	0214 B	31207		2495	14541
238	0030	0105	31317	740 C	2511	14495
238	0040	0052	31623		2538	14476
238	0050	0050	31631	720 C	2539	14477

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1730 B	29763		2146	15082	0000	00000	6347
0010	1630	29727		2166	15052	0063	00003	6159
0020	0526	31061		2455	14672	0111	00010	3394
0030	0105	31317		2511	14495	0142	00018	2862
0050	0050	31631		2539	14477	0197	00040	2593

C-REF-NO 001 YR 1964 DEPTH 34 WAVES 1 04X2 AIR T 14.6 VIS 8
 CONS. NO 034 MONTH 8 MXSAMPD 00 WAVES 2 04X2 WET B 13.6 STN 044
 LAT 46-300N DAY 05 NO.DPTH 6 WND-DIR 040 WW-CODE 61
 LON 61-080W HR 00.6 W-COLOR WND-SPD 07 CLD-TPE 4
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1010.0 CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
008	0000	148 B	29809		2205	15004
008	0010	1366	29904		2235	14969
008	0015	0875	30390	660 C	2358	14801
008	0020	0545	30737		2428	14675
008	0025	0510	30754		2433	14662
008	0030	0302	30963	700 C	2469	14577

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1480 B	29809		2205	15004	0000	00000	5787
0010	1366	29904		2235	14969	0057	00003	5498
0020	0545	30737		2428	14675	0103	00009	3657
0030	0302	30963		2469	14577	0137	00018	3262

C-REF-NO 001	YR 1964	DEPTH 38	WAVES 1 03X1	AIR T 14.1	VIS B
CONS. NO 035	MONTH 8	MXSAMPD 00	WAVES 2 03X2	WET B 12.9	STN 045
LAT 46-402N	DAY 05	NO.DPTH 7	WNO-DIR 030	WW-CODE 03	
LON 61-016W	HR 02.1	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1009.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
023	0000	143 B	29936		2225	14989
023	0010	1104	30165		2303	14882
023	0015	0910 B	30474	670 C	2359	14815
023	0020	0773	30472		2379	14763
023	0025	0568	30580		2413	14683
023	0030	0425	30823	680 C	2447	14628
023	0035	0266 B	31139	700 C	2486	14565

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1430 B	29936		2225	14989	0000	00000	5595
0010	1104	30165		2303	14882	0052	00002	4843
0020	0773	30472		2379	14763	0097	00009	4127
0030	0425	30823		2447	14628	0136	00019	3473

C-REF-NO 001	YR 1964	DEPTH 85	WAVES 1 03X1	AIR T 15.5	VIS 8
CONS. NO 036	MONTH 8	MXSAMPD 01	WAVES 2 03X2	WET B 14.0	STN 046
LAT 46-400N	DAY 05	NO.DPTH 11	WND-DIR 030	WW-CODE 02	
LON 61-150W	HR 03.3	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1009.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
036	0000	163 B	29906		2180	15053
036	0010	1570	30014	600 C	2201	15037
036	0015	0671	31261		2454	14732
036	0020	0342	31408		2501	14599
036	0025	0178 B	31504		2521	14529
036	0030	0094	31541	760 C	2529	14493
036	0040	0035	31671		2543	14469
036	0050	0044	32118		2578	14481
036	0060	0044	32236		2588	14485
036	0075	0086	32752		2627	14513
036	0080	0087	32786	620 C	2630	14515

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1630 B	29906		2180	15053	0000	00000	6025
0010	1570	30014		2201	15037	0059	00003	5822
0020	0342	31408		2501	14599	0103	00009	2958
0030	0094	31541		2529	14493	0132	00016	2685
0050	0044	32118		2578	14481	0181	00036	2219
0075	0086	32752		2627	14513	0231	00067	1758

C-REF-NO 001	YR 1964	DEPTH 59	WAVES 1 02X1	AIR T 15.6	VIS 8
CONS. NO 037	MONTH 8	MXSAMPD 01	WAVES 2 02X2	WET B 13.9	STN 047
LAT 46-399N	DAY 05	NO.DPTH 9	WND-DIR 020	WW-CODE 02	
LON 61-300W	HR 04.8	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.8	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
051	0000	153 B	30326		2234	15026
051	0010	1516	30334	610 C	2237	15024
051	0015	0615	31193		2455	14709
051	0020	0281	31549		2517	14574
051	0025	0065	31611		2537	14480
051	0030	0028	31650	720 C	2542	14464
051	0040	0002	31685		2546	14454
051	0050	-0018	31717		2549	14447
051	0055	-0018	31758	730 C	2552	14449

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1530 B	30326		2234	15026	0000	00000	5509
0010	1516	30334		2237	15024	0055	00003	5477
0020	0281	31549		2517	14574	0097	00008	2802
0030	0028	31650		2542	14464	0124	00015	2569
0050	-0018	31717		2549	14447	0175	00036	2498

C-REF-NO 001 YR 1964 DEPTH 62 WAVES 1 36X1 AIR T 16.0 VIS 8
 CONS. NO 038 MONTH 8 MXSAMPD 01 WAVES 2 36X2 WET B 13.9 STN 048
 LAT 46-398N DAY 05 NO.DPTH 9 WND-DIR 360 WW-CODE
 LON 61-450W HR 06.2 W-COLOR WND-SPD 05 CLD-TPE
 MARSQ SQ 151 C/I 1801 W-TRNSP BARO 1008.0 CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
065	0000	159 B	29922		2190	15041
065	0010	1596	29924	600 C	2189	15044
065	0015	1340 B	30350		2274	14967
065	0020	0649	31067	700 C	2441	14722
065	0025	0384 B	31316		2490	14616
065	0030	0132	31571	740 C	2530	14510
065	0040	0096	31595		2534	14496
065	0050	0080	31614		2536	14491
065	0059	0064	31630	710 C	2538	14485

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1590 B	29922		2190	15041	0000	00000	5929
0010	1596	29924		2189	15044	0060	00003	5943
0020	0649	31067		2441	14722	0107	00010	3527
0030	0132	31571		2530	14510	0138	00017	2684
0050	0080	31614		2536	14491	0192	00039	2622

C-REF-NO 001 YR 1964 DEPTH 61 WAVES 1 36X1 AIR T 16.6 VIS 8
 CONS. NO 039 MONTH 8 MXSAMPD 00 WAVES 2 36X2 WET B 13.9 STN 049
 LAT 46-393N DAY 05 NO.DPTH 8 WND-DIR 360 WW-CODE
 LON 62-005W HR 07.7 W-COLOR WND-SPD 05 CLD-TPE X
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1007.5 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
079	0000	164 B	29284		2130	15049
079	0010	1640	29298	600 C	2131	15050
079	0015	1639	29295		2131	15051
079	0020	0903	30011	620 C	2324	14807
079	0025	0464	31103		2465	14647
079	0030	0220 B	31294		2502	14546
079	0040	0033	31590		2537	14467
079	0050	0030	31602	700 C	2538	14468

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1640 B	29284		2130	15049	0000	00000	6502
0010	1640	29298		2131	15050	0065	00003	6494
0020	0903	30011		2324	14807	0121	00011	4649
0030	0220 B	31294		2502	14546	0159	00021	2951
0050	0030	31602		2538	14468	0215	00043	2606

C-REF-NO 001	YR 1964	DEPTH 67	WAVES 1 36X2	AIR T 16.2	VIS 8
CONS. NO 040	MONTH 8	MXSAMPD 01	WAVES 2 36X2	WET B 14.4	STN 050
LAT 46-500N	DAY 05	NO.DPTH 9	WND-DIR 360	WW-CODE 01	
LON 61-595W	HR 10.5	W-COLOR	WND-SPD 07	CLD-TPE 8	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.5	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
108	0000	157 B	30292		2222	15039
108	0010	1568	30264	600 C	2221	15039
108	0015	1565	30266		2221	15039
108	0019	1184	30670		2328	14918
108	0024	0923	30964		2395	14828
108	0029	0481	31392	740 C	2486	14659
108	0039	0046	31676		2543	14474
108	0049	0030	31685		2544	14469
108	0063	0024	31692	700 C	2545	14468

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1570 B	30292		2222	15039	0000	00000	5616
0010	1568	30264		2221	15039	0056	00003	5635
0020	1129 D	3073 C		2343	14900	0107	00010	4467
0030	0415	3144 C		2497	14632	0145	00020	2996
0050	0029	31686		2544	14468	0200	00042	2542

C-REF-NO 001 YR 1964 DEPTH 68 WAVES 1 32X2 AIR T 15.6 VIS 8
 CONS. NO 041 MONTH 8 MXSAMPD 01 WAVES 2 32X2 WET B 14.4 STN 051
 LAT 46-505N DAY 05 NO.DPTH 9 WND-DIR 320 WW-CODE 01
 LON 61-450W HR 11.9 W-COLOR WND-SPD 07 CLD-TPE 2
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1008.0 CLD-AMT 4 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
121	0000	157 B	30208		2216	15038
121	0010	1555	30189	610 C	2218	15034
121	0015	1550	30191		2219	15034
121	0020	0690	31171		2444	14740
121	0025	0281	31518		2515	14575
121	0029	0170	31588	690 C	2529	14527
121	0039	0044	31671		2543	14473
121	0049	-0007	31707		2548	14452
121	0064	-0002	31858	690 C	2560	14459

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1570 B	30208		2216	15038	0000	00000	5678
0010	1555	30189		2218	15034	0057	00003	5663
0020	0690	31171		2444	14740	0103	00009	3499
0030	0151	31600		2531	14519	0134	00017	2673
0050	-0007	31717		2549	14452	0186	00038	2502

C-REF-NO 001	YR 1964	DEPTH	55	WAVES 1 33X1	AIR T 15.9	VIS 8
CONS. NO 042	MONTH 8	MXSAMPD	00	WAVES 2 33X2	WET B 14.1	STN 052
LAT 46-500N	DAY 05	NO.DPTH	8	WND-DIR 330	WW-CODE 03	
LON 61-300W	HR 13.3	W-COLOR		WND-SPD 05	CLD-TPE 7	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1008.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
134	0000	159 B	29844		2184	15040
134	0010	1588	29811	600 C	2182	15040
134	0015	0562	31259		2467	14688
134	0020	0282	31503		2514	14574
134	0025	0062	31607		2536	14478
134	0030	0024	31648	750 C	2542	14462
134	0039	-0004	31700		2547	14452
134	0049	0000	31834	710 C	2558	14457

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1590 B	29844		2184	15040	0000	00000	5986
0010	1588	29811		2182	15040	0060	00003	6009
0020	0282	31503		2514	14574	0105	00009	2837
0030	0024	31648		2542	14462	0132	00016	2569
0050	0003	31848		2559	14459	0182	00036	2407

C-REF-NO 001	YR 1964	DEPTH 55	WAVES 1 33X1	AIR T 16.0	VIS 8
CONS. NO 043	MONTH 8	MXSAMPD 00	WAVES 2 33X2	WET B 13.1	STN 053
LAT 46-500N	DAY 05	NO.DPTH 8	WND-DIR 330	WW-CODE 03	
LON 61-150W	HR 14.6	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0000	157 B	29982		2199	15035
149	0010	1559	29964	610 C	2200	15033
149	0015	0490	31377		2484	14660
149	0020	0205	31507		2520	14540
149	0025	0080	31558		2532	14486
149	0030	0054	31593	760 C	2536	14475
149	0040	0014	31691		2546	14460
149	0050	0031	32242	670 C	2589	14477

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1570 B	29982		2199	15035	0000	00000	5843
0010	1559	29964		2200	15033	0059	00003	5836
0020	0205	31507		2520	14540	0102	00009	2779
0030	0054	31593		2536	14475	0129	00016	2625
0050	0031	32242		2589	14477	0177	00035	2118

C-REF-NO 001	YR 1964	DEPTH 122	WAVES 1 33X1	AIR T 16.4	VIS 8
CONS. NO 044	MONTH 8	MXSAMPD 01	WAVES 2 33X2	WET B 14.0	STN 054
LAT 46-501N	DAY 05	NO.DPTH 12	WND-DIR 330	WW-CODE	
LON 61-000W	HR 15.9	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
162	0000	165 B	29718		2161	15057
162	0010	1091	30421	690 C	2326	14880
162	0015	0604 D	30782		2424	14699
162	0020	0506 B	31367		2482	14667
162	0025	0212	31403		2511	14543
162	0030	0118	31514	780 C	2526	14503
162	0040	0026	31676		2544	14465
162	0050	-0008	31753	770 C	2551	14452
162	0060	0006	32023		2573	14464
162	0075	0028	32446	740 C	2606	14483
162	0099	0064	32704		2624	14507
162	0119	0119	33040	620 C	2648	14539

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1650 B	29718		2161	15057	0000	00000	6206
0010	1091	30421		2326	14880	0054	00002	4632
0020	0506 B	31367		2482	14667	0093	00008	3143
0030	0118	31514		2526	14503	0123	00015	2719
0050	-0008	31753		2551	14452	0175	00037	2474
0075	0028	32446		2606	14483	0231	00071	1960
0100	0071	3281 I		2633	14511	0277	00112	1704

C-REF-NO 001	YR 1964	DEPTH 38	WAVES 1 36X1	AIR T 15.0	VIS 8
CONS. NO 045	MONTH 8	MXSAMPD 00	WAVES 2 36X2	WET B 13.6	STN 055
LAT 46-500N	DAY 05	NO.DPTH 7	WND-DIR 360	WW-CODE	
LON 60-500W	HR 17.5	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
177	0000	118 B	30219		2294	14908
177	0010	0994	30518	680 C	2349	14846
177	0015	0668	30537		2397	14722
177	0020	0498	30755	680 C	2434	14656
177	0025	0341 B	31088		2476	14595
177	0030	0249	31291		2499	14558
177	0035	0154	31464	760 C	2520	14520

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1180 B	30219		2294	14908	0000	00000	4928
0010	0994	30518		2349	14846	0047	00002	4406
0020	0498	30755		2434	14656	0087	00008	3595
0030	0249	31291		2499	14558	0120	00017	2973

C-REF-NO 001	YR 1964	DEPTH 84	WAVES 1 36X1	AIR T 14.8	VIS B
CONS. NO 046	MONTH 8	MXSAMPD 01	WAVES 2 36X2	WET B 13.2	STN 056
LAT 47-001N	DAY 05	NO.DPTH 10	WND-DIR 360	WW-CODE 03	
LON 60-411W	HR 19.0	W-COLOR	WND-SPD 03	CLD-TPE 6	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
192	0000	135 B	30085		2252	14965
192	0010	0609	30671	680 C	2415	14699
192	0015	0402	30932		2458	14617
192	0020	0285	31246		2493	14572
192	0025	0184 B	31305		2505	14529
192	0030	0193	31398	740 C	2512	14535
192	0040	0025	31667		2543	14465
192	0050	0065	31814		2553	14487
192	0060	0050	32004		2569	14484
192	0075	0056	32530	660 C	2611	14497

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1350 B	30085		2252	14965	0000	00000	5333
0010	0609	30671		2415	14699	0046	00002	3776
0020	0285	31246		2493	14572	0080	00007	3034
0030	0193	31398		2512	14535	0110	00015	2853
0050	0065	31814		2553	14487	0163	00036	2461
0075	0056	32530		2611	14497	0218	00070	1910

C-REF-NO 001	YR 1964	DEPTH 137	WAVES 1 36X1	AIR T 15.0	VIS 8
CONS. NO 047	MONTH 8	MXSAMPD 01	WAVES 2 36X2	WET B 13.4	STN 057
LAT 47-001N	DAY 05	NO.DPTH 12	WND-DIR 360	WW-CODE 01	
LON 60-499W	HR 20.1	W-COLOR	WND-SPD 02	CLD-TPE 6	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1009.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
204	0000	167 B	29720		2156	15063
204	0010	1350	29899	620 C	2238	14964
204	0015	0602	31306		2466	14705
204	0020	0433	31380		2490	14637
204	0025	0184	31400		2513	14530
204	0030	0174	31535	800 C	2524	14529
204	0040	0030	31655		2542	14467
204	0050	-0023	31717		2549	14445
204	0060	0037	32081		2576	14479
204	0075	0050	32501	670 C	2609	14493
204	0100	0107	32988		2645	14530
204	0130	0169	33295	550 C	2665	14567

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1670 B	29720		2156	15063	0000	00000	6247
0010	1350	29899		2238	14964	0059	00003	5472
0020	0433	31380		2490	14637	0102	00009	3060
0030	0174	31535		2524	14529	0131	00016	2737
0050	-0023	31717		2549	14445	0183	00037	2496
0075	0050	32501		2609	14493	0239	00072	1929
0100	0107	32988		2645	14530	0283	00111	1591
0125	0156	33269		2664	14560	0321	00155	1410

C-REF-NO 001	YR 1964	DEPTH 88	WAVES 1 29X0	AIR T 14.5	VIS 8
CONS. NO 048	MONTH 8	MXSAMPD 01	WAVES 2 36X1	WET B 13.0	STN 058
LAT 47-000N	DAY 05	NO.DPTH 11	WND-DIR 290	WW-CODE	
LON 61-000W	HR 23.1	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1010.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
233	0000	164 B	29911		2178	15056
233	0010	1622	29924	610 C	2183	15052
233	0015	0750	31107		2431	14762
233	0020	0370	31489	760 C	2505	14612
233	0025	0198	31670		2533	14540
233	0030	0078	31770	770 C	2549	14489
233	0040	0065	32030		2570	14488
233	0050	0042	32221		2587	14482
233	0060	0032	32315	740 C	2595	14480
233	0075	0032	32401		2602	14484
233	0085	0032	32484	710 C	2608	14487

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1640 B	29911		2178	15056	0000	00000	6043
0010	1622	29924		2183	15052	0060	00003	5998
0020	0370	31489		2505	14612	0105	00009	2921
0030	0078	31770		2549	14489	0132	00016	2502
0050	0042	32221		2587	14482	0179	00035	2139
0075	0032	32401		2602	14484	0231	00068	1996

C-REF-NO 001	YR 1964	DEPTH 46	WAVES 1 29X0	AIR T 14.5	VIS 8
CONS. NO 049	MONTH 8	MXSAMPD 00	WAVES 2 36X2	WET B 12.8	STN 059
LAT 46-598N	DAY 06	NO.DPTH 8	WND-DIR 290	WW-CODE 01	
LON 61-155W	HR 00.3	W-COLOR	WND-SPD 02	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1010.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
006	0000	169 B	30064		2178	15073
006	0010	1565	30141	620 C	2212	15037
006	0015	1437	30438		2262	15000
006	0020	0670	31399		2465	14735
006	0025	0310	31496		2511	14587
006	0030	0178	31657	760 C	2534	14532
006	0040	0064	32006		2568	14487
006	0045	0058	32027	690 C	2570	14486

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1690 B	30064		2178	15073	0000	00000	6039
0010	1565	30141		2212	15037	0059	00003	5719
0020	0670	31399		2465	14735	0104	00009	3304
0030	0178	31657		2534	14532	0134	00017	2647

C-REF-NO 001	YR 1964	DEPTH 41	WAVES 1 20X1	AIR T 14.3	VIS B
CONS. NO 050	MONTH 8	MXSAMPD 00	WAVES 2 36X2	WET B 12.9	STN 060
LAT 46-597N	DAY 06	NO.DPTH 7	WND-DIR 200	WW-CODE	
LON 61-300W	HR 01.5	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1011.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
017	0000	150 B	30441		2249	15018
017	0010	1500	30467	630 C	2251	15020
017	0015	1476	30434		2253	15013
017	0020	0602	31195	680 C	2457	14705
017	0025	0469	31489		2495	14655
017	0030	0396 B	31586		2510	14626
017	0040	0266	31659	710 C	2527	14573

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1500 B	30441		2249	15018	0000	00000	5363
0010	1500	30467		2251	15020	0054	00003	5347
0020	0602	31195		2457	14705	0098	00009	3376
0030	0396 B	31586		2510	14626	0129	00017	2871

C-REF-NO 001	YR 1964	DEPTH 42	WAVES 1 20X1	AIR T 14.9	VIS B
CONS. NO 051	MONTH 8	MXSAMPD 00	WAVES 2 36X2	WET B 13.9	STN 061
LAT 46-597N	DAY 06	NO.DPTH 7	WND-DIR 200	WW-CODE	
LON 61-450W	HR 02.6	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1011.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
028	0000	152 B	30458		2246	15025
028	0010	1510	30416	620 C	2245	15023
028	0015	1256 B	30451		2298	14939
028	0020	0851 B	30797		2393	14798
028	0025	0636	31261	670 C	2458	14720
028	0030	0550 B	31399		2479	14688
028	0040	0323	31560	680 C	2515	14596

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1520 B	30458		2246	15025	0000	00000	5392
0010	1510	30416		2245	15023	0054	00003	5404
0020	0851 B	30797		2393	14798	0101	00010	3990
0030	0550 B	31399		2479	14688	0137	00019	3166

C-REF-NO 001	YR 1964	DEPTH 46	WAVES 1 24X1	AIR T 13.9	VIS 8
CONS. NO 052	MONTH 8	MXSAMPD 00	WAVES 2 36X1	WET B	STN 062
LAT 47-000N	DAY 06	NO.DPTH 7	WND-DIR 240	WW-CODE	
LON 61-599W	HR 03.8	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1010.8	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
040	0000	153 B	30400		2239	15027
040	0010	1530	30450	610 C	2243	15030
040	0015	1359	30630		2292	14977
040	0020	0852	31024		2410	14801
040	0025	0492 B	31390	680 C	2485	14663
040	0030	0335	31555		2513	14599
040	0045	0177	31613	700 C	2530	14533

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1530 B	30400		2239	15027	0000	00000	5455
0010	1530	30450		2243	15030	0055	00003	5420
0020	0852	31024		2410	14801	0101	00009	3822
0030	0335	31555		2513	14599	0134	00018	2841

C-REF-NO 001	YR 1964	DEPTH 37	WAVES 1 00X0	AIR T 15.6	VIS 8
CONS. NO 053	MONTH 8	MXSAMPD 00	WAVES 2 36X1	WET B 15.0	STN 063
LAT 47-099N	DAY 06	NO.DPTH 7	WNO-DIR CALM	WW-CODE 02	
LON 62-001W	HR 05.1	W-COLOR	WNO-SPD 00	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1010.5	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
052	0000	149 B	30267		2238	15013
052	0010	1474	30264	620 C	2241	15009
052	0015	1458	30256		2243	15005
052	0020	1400	30267		2256	14987
052	0025	0866 B	30851	650 C	2395	14805
052	0030	0744	31074		2430	14761
052	0035	0652	31183	650 C	2450	14727

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1490 B	30267		2238	15013	0000	00000	5471
0010	1474	30264		2241	15009	0055	00003	5444
0020	1400	30267		2256	14987	0109	00011	5298
0030	0744	31074		2430	14761	0153	00022	3641

C-REF-NO 001 YR 1964 DEPTH 29 WAVES 1 18X0 AIR T 15.6 VIS 8
 CONS. NO 054 MONTH 8 MXSAMPD 00 WAVES 2 36X1 WET B 14.9 STN 064
 LAT 47-100N DAY 06 NO.DPTH 5 WND-DIR 180 WW-CODE 02
 LON 61-451W HR 06.4 W-COLOR WND-SPD 01 CLD-TPE X
 MARSD SQ 151 C/I 1801 W-TRNSP BAKO 1010.5 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
066	0000	150 B	30229		2233	15016
066	0010	1504	30217	620 C	2231	15018
066	0015	1434	30210		2245	14996
066	0020	1436	30260		2248	14998
066	0025	1323	30291	600 C	2273	14962

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1500 B	30229		2233	15016	0000	00000	5519
0010	1504	30217		2231	15018	0055	00003	5538
0020	1436	30260		2248	14998	0110	00011	5374

C-REF-NO 001	YR 1964	DEPTH 27	WAVES 1 18X0	AIR T 15.5	VIS 8
CONS. NO 055	MONTH 8	MXSAMPD 00	WAVES 2 36X1	WET B 14.7	STN 065
LAT 47-103N	DAY 06	NO.DPTH 5	WND-DIR 180	WW-CODE 02	
LON 61-295W	HR 07.7	W-COLOR	WND-SPD 01	CLD-TPE 6	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1011.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
078	0000	153 B	30449		2243	15028
078	0010	1530	30438	610 C	2242	15029
078	0015	1528	30436		2242	15030
078	0020	1299	30541		2297	14956
078	0025	0476	31621	740 C	2505	14659

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1530 B	30449		2243	15028	0000	00000	5419
0010	1530	30438		2242	15029	0054	00003	5429
0020	1299	30541		2297	14956	0106	00011	4906

C-REF-NO 001	YR 1964	DEPTH 44	WAVES 1 18X0	AIR T 16.1	VIS 8
CONS. NO 056	MONTH 8	MXSAMPD 00	WAVES 2 36X2	WET B 15.0	STN 066
LAT 47-098N	DAY 06	NO.DPTH 7	WND-DIR 180	WW-CODE 02	
LON 61-150W	HR 08.8	W-COLOR	WND-SPD 02	CLD-TPE 4	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1011.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
090	0000	153 B	30323		2233	15026
090	0010	1516	30359	610 C	2239	15024
090	0015	1514	30354		2239	15024
090	0020	0613	31546		2483	14714
090	0025	0174	31692		2537	14530
090	0030	0042	31786	740 C	2552	14473
090	0040	0056	31940	680 C	2564	14483

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1530 B	30323		2233	15026	0000	00000	5511
0010	1516	30359		2239	15024	0055	00003	5458
0020	0613	31546		2483	14714	0098	00009	3126
0030	0042	31786		2552	14472	0126	00016	2472

C-REF-NO 001	YR 1964	DEPTH 82	WAVES 1 18X0	AIR T 16.2	VIS 8
CONS. NO 057	MONTH 8	MXSAMPD 01	WAVES 2 36X2	WET B 15.3	STN 067
LAT 47-102N	DAY 06	NO.DPTH 10	WND-DIR 180	WW-CODE 01	
LON 61-000W	HR 10.1	W-COLOR	WND-SPD 02	CLD-TPE 3	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1011.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
103	0000	158 B	30080		2204	15039
103	0010	1569	30111	610 C	2209	15038
103	0015	1373	30497		2279	14980
103	0020	0424	31371		2490	14633
103	0025	0324 B	31507		2510	14593
103	0030	0144 B	31865	760 C	2552	14520
103	0040	0034	32070		2575	14474
103	0050	0030	32246		2589	14477
103	0060	0034	32402		2602	14482
103	0079	0032	32437	730 C	2605	14485

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1580 B	30080		2204	15039	0000	00000	5792
0010	1569	30111		2209	15038	0058	00003	5749
0020	0424	31371		2490	14633	0102	00009	3059
0030	0144 B	31865		2552	14520	0130	00016	2467
0050	0030	32246		2589	14477	0176	00035	2115
0075	0032	3245 B		2605	14484	0227	00067	1962

C-REF-NO 001	YR 1964	DEPTH 135	WAVES 1 22X1	AIR T 16.0	VIS 8
CONS. NO 058	MONTH 8	MXSAMPD 01	WAVES 2 36X3	WET B 14.9	STN 068
LAT 47-106N	DAY 06	NO.DPTH 13	WND-DIR 220	WW-CODE	
LON 60-440W	HR 11.4	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1011.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
117	0000	162 B	29773		2172	15048
117	0005	1619	29788		2173	15049
117	0010	1616	29797	610 C	2174	15049
117	0015	1201	30165		2286	14917
117	0020	0943	30988		2394	14835
117	0024	0333	31529	760 C	2511	14597
117	0034	0096	31740		2545	14497
117	0044	0030	31990	730 C	2569	14472
117	0054	0028	32359		2599	14478
117	0068	0026	32575	740 C	2616	14482
117	0093	0056	32933		2643	14505
117	0117	0094	33142		2658	14529
117	0132	0168	33399	600 C	2674	14568

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1620 B	29773		2172	15048	0000	00000	6102
0010	1616	29797		2174	15049	0061	00003	6078
0020	0943	30988		2394	14835	0112	00010	3981
0030	0070 I	3175 I		2548	14485	0144	00018	2513
0050	0025	3222 D		2587	14474	0191	00037	2136
0075	0032	3268 B		2625	14488	0240	00068	1780
0100	0062	3299 D		2647	14510	0282	00105	1564
0125	0136	3330 F		2668	14552	0319	00148	1374

C-REF-NO 001	YR 1964	DEPTH 21	WAVES 1 27X0	AIR T 17.6	VIS 8
CONS. NO 059	MONTH 8	MXSAMPD 00	WAVES 2 27X1	WET B 15.5	STN 069
LAT 46-297N	DAY 06	NO.DPTH 5	WND-DIR 270	WW-CODE	
LON 62-000W	HR 21.2	W-COLOR	WND-SPD 01	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1014.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
214	0000	169 B	29805		2158	15070
214	0005	1661	29803	610 C	2165	15062
214	0010	1450	29979	620 C	2224	14998
214	0015	0965 B	30394	660 C	2344	14835
214	0020	0740 B	30872	670 C	2414	14755

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1690 B	29805		2158	15070	0000	00000	6229
0010	1450	29979		2224	14998	0059	00003	5605
0020	0740 B	30872		2414	14755	0106	00010	3785

C-REF-NO 001	YR 1964	DEPTH 42	WAVES 1 22X0	AIR T 17.1	VIS 8
CONS. NO 060	MONTH 8	MXSAMPD 00	WAVES 2 22X1	WET B 16.1	STN 070
LAT 46-300N	DAY 06	NO.DPTH 7	WND-DIR 220	WW-CODE	
LON 61-443W	HR 22.6	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1014.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
228	0000	161 B	29899		2184	15047
228	0010	1524	30217	600 C	2227	15025
228	0015	1334	30192		2263	14963
228	0020	0619	30982		2438	14709
228	0025	0536	31073	690 C	2455	14677
228	0030	0486	31156		2467	14658
228	0040	0224	31439	710 C	2513	14551

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1610 B	29899		2184	15047	0000	00000	5988
0010	1524	30217		2227	15025	0058	00003	5579
0020	0619	30982		2438	14709	0104	00009	3555
0030	0486	31156		2467	14658	0138	00018	3282

C-REF-NO 001	YR 1964	DEPTH 55	WAVES 1 22X1	AIR T 16.4	VIS 8
CONS. NO 061	MONTH 8	MXSAMPD 00	WAVES 2 22X2	WET B 14.9	STN 071
LAT 46-305N	DAY 07	NO.DPTH 8	WND-DIR 220	WW-CODE 03	
LON 61-297W	HR 00.0	W-COLOR	WND-SPD 04	CLD-TPE 6	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1015.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
000	0000	164 B	30062		2189	15058
000	0010	1642	30051	600 C	2188	15060
000	0015	1490 B	30550		2259	15019
000	0020	0485	31417	760 C	2488	14659
000	0025	0156 B	31531		2525	14520
000	0030	0134	31549	720 C	2528	14511
000	0039	0090	31548		2530	14493
000	0049	0047	31624	740 C	2539	14476

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1640 B	30062		2189	15058	0000	00000	5933
0010	1642	30051		2188	15060	0060	00003	5947
0020	0485	31417		2488	14659	0105	00009	3084
0030	0134	31549		2528	14511	0134	00017	2702
0050	0043	31631		2539	14474	0187	00038	2590

C-REF-NO 001	YR 1964	DEPTH	57	WAVES 1 22X1	AIR T 16.5	VIS 8
CONS. NO 062	MONTH 8	MXSAMPD	01	WAVES 2 22X2	WET B 15.0	STN 072
LAT 46-300N	DAY 07	NO.DPTH	9	WND-DIR 220	WV-CODE 02	
LON 61-150W	HR 01.1	W-COLOR		WND-SPD 04	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1015.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
013	0000	167 B	29806		2163	15064
013	0010	1467	29891	610 C	2214	15002
013	0015	1142	30384		2314	14899
013	0020	0767	31036		2424	14768
013	0025	0382	31118		2474	14613
013	0030	0119	31171	720 C	2498	14499
013	0040	0141	31475		2521	14515
013	0050	0056	31629		2539	14480
013	0054	0062	31672	710 C	2542	14484

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1670 B	29806		2163	15064	0000	00000	6184
0010	1467	29891		2214	15002	0060	00003	5703
0020	0767	31036		2424	14768	0107	00010	3698
0030	0119	31171		2498	14499	0140	00018	2981
0050	0056	31629		2539	14480	0196	00041	2598

C-REF-NO 001	YR 1964	DEPTH	35	WAVES 1 17X1	AIR T 15.8	VIS B
CONS. NO 063	MONTH 8	MXSAMPD	00	WAVES 2 17X2	WET B 14.7	STN 073
LAT 46-300N	DAY 07	NO.DPTH	6	WND-DIR 170	WW-CODE 02	
LON 61-075W	HR 01.9	W-COLOR		WND-SPD 04	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1016.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
020	0000	150 B	29861		2204	15011
020	0010	1100	30172	660 C	2305	14880
020	0015	0845	30291		2354	14788
020	0020	0772	30485		2380	14763
020	0025	0652 B	30507		2397	14717
020	0030	0592	30686	660 C	2418	14695

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1500 B	29861		2204	15011	0000	00000	5789
0010	1100	30172		2305	14880	0053	00002	4831
0020	0772	30485		2380	14763	0098	00009	4116
0030	0592	30686		2418	14695	0138	00019	3748

C-REF-NO 001	YR 1964	DEPTH 40	WAVES 1 18X1	AIR T 16.0	VIS 8
CONS. NO 064	MONTH 8	MXSAMPD 00	WAVES 2 18X2	WET B 14.3	STN 074
LAT 46-400N	DAY 07	NO.DPTH 7	WND-DIR 180	WW-CODE 02	
LON 61-015W	HR 03.0	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1016.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
031	0000	160 B	29807		2179	15042
031	0010	1554	29977	640 C	2202	15031
031	0015	1251	29954		2261	14932
031	0020	0798	30476		2375	14773
031	0025	0673	30598	660 C	2402	14726
031	0030	0638	30645		2410	14714
031	0035	0562 C	30712	670 C	2424	14684

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1600 B	29807		2179	15042	0000	00000	6034
0010	1554	29977		2202	15031	0059	00003	5816
0020	0798	30476		2375	14773	0109	00010	4157
0030	0638	30645		2410	14714	0150	00020	3831

C-REF-NO 001	YR 1964	DEPTH 84	WAVES 1 19X1	AIR T 16.1	VIS
CONS. NO 065	MONTH 8	MXSAMPD 01	WAVES 2 19X1	WET B 15.1	STN 075
LAT 46-399N	DAY 07	NO.DPTH 10	WND-DIR 190	WW-CODE 02	
LON 61-151W	HR 04.2	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1016.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
045	0000	164 B	30040		2188	15058
045	0010	1641	30020	620 C	2186	15059
045	0015	0981	30034		2314	14836
045	0020	0450	31370		2488	14644
045	0025	0209	31390		2510	14541
045	0030	0128	31524	720 C	2526	14508
045	0040	0056	31613		2537	14478
045	0050	0048	31735	740 C	2547	14478
045	0059	0032	31968		2567	14475
045	0079	0088	32808	620 C	2631	14516

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1640 B	30040		2188	15058	0000	00000	5949
0010	1641	30020		2186	15059	0060	00003	5968
0020	0450	31370		2488	14644	0105	00009	3084
0030	0128	31524		2526	14508	0134	00017	2717
0050	0048	31735		2547	14478	0187	00038	2513
0075	0074	32599		2616	14505	0242	00072	1867

C-REF-NO 001	YR 1964	DEPTH 61	WAVES 1 20X0	AIR T 16.0	VIS 8
CONS. NO 066	MONTH 8	MXSAMPD 01	WAVES 2 20X1	WET B 15.0	STN 076
LAT 46-400N	DAY 07	NO.DPTH 9	WND-DIR 200	WW-CODE	
LON 61-300W	HR 05.6	W-COLOR	WND-SPD 02	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1016.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
058	0000	157 B	30162		2212	15037
058	0010	0876	31025	730 C	2407	14808
058	0015	0412	31451		2498	14628
058	0020	0231	31547		2521	14552
058	0025	0088	31621	810 C	2536	14490
058	0030	0034	31639		2540	14467
058	0040	0008	31678	710 C	2545	14457
058	0050	0004	31709		2547	14457
058	0060	-0004	31921	700 C	2565	14458

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1570 B	30162		2212	15037	0000	00000	5712
0010	0876	31025		2407	14808	0048	00002	3854
0020	0231	31547		2521	14552	0081	00007	2766
0030	0034	31639		2540	14467	0108	00014	2581
0050	0004	31709		2547	14457	0159	00035	2513

C-REF-NO 001	YR 1964	DEPTH 61	WAVES 1 20X0	AIR T 16.3	VIS 8
CONS. NO 067	MONTH 8	MXSAMPD 01	WAVES 2 20X1	WET B 15.6	STN 077
LAT 46-402N	DAY 07	NO.DPTH 9	WND-DIR 200	WW-CODE 00	
LON 61-448W	HR 06.8	W-COLOR	WND-SPD 02	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1016.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
071	0000	162 B	30141		2200	15053
071	0010	1540	30413	610 C	2238	15032
071	0015	1061	30863		2365	14876
071	0020	0588	31314		2468	14700
071	0025	0229	31448	750 C	2513	14551
071	0030	0094 B	31584		2533	14493
071	0040	0020	31662	700 C	2543	14462
071	0050	0014	31678		2545	14461
071	0060	0015	31676	670 C	2544	14464

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1620 B	30141		2200	15053	0000	00000	5832
0010	1540	30413		2238	15032	0057	00003	5468
0020	0588	31314		2468	14700	0101	00009	3271
0030	0094 B	31584		2533	14493	0130	00016	2652
0050	0014	31678		2545	14461	0183	00038	2541

C-REF-NO 001 YR 1964 DEPTH 51 WAVES 1 20X0 AIR T 16.5 VIS 6
 CONS. NO 068 MONTH 8 MXSAMPD 00 WAVES 2 20X1 WET B 15.9 STN 078
 LAT 46-400N DAY 07 NO.DPTH 8 WND-DIR 200 WW-CODE
 LON 61-594W HR 08.2 W-COLOR WND-SPD 01 CLD-TPE
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1016.5 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
084	0000	167 B	29590		2147	15061
084	0010	1630	29820	600 C	2173	15053
084	0015	1446	29787		2210	14995
084	0020	0672	30625	690 C	2404	14725
084	0025	0376 B	31250		2485	14612
084	0030	0206 B	31311	780 C	2504	14540
084	0040	0019	31614		2539	14461
084	0050	0018	31609	710 C	2539	14462

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1670 B	29590		2147	15061	0000	00000	6343
0010	1630	29820		2173	15053	0062	00003	6091
0020	0672	30625		2404	14725	0112	00010	3885
0030	0206 B	31311		2504	14540	0147	00019	2928
0050	0018	31609		2539	14462	0202	00041	2595

C-REF-NO 001	YR 1964	DEPTH 68	WAVES 1 36X0	AIR T 16.4	VIS 6
CONS. NO 069	MONTH 8	MXSAMPD 01	WAVES 2 36X1	WET B 15.5	STN 080
LAT 46-500N	DAY 07	NO.DPTH 10	WND-DIR 360	WW-CODE 02	
LON 62-000W	HR 12.0	W-COLOR	WND-SPD 02	CLD-TPE 7	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
122	0000	168 B	29439		2133	15063
122	0010	1610	29612	600 C	2162	15045
122	0015	1590	30011		2197	15044
122	0020	0949	30893		2386	14836
122	0025	0772 B	31234		2438	14773
122	0030	0468	31292	730 C	2480	14652
122	0040	0032	31688		2544	14468
122	0050	0025	31704	690 C	2546	14467
122	0060	0021	31691		2545	14467
122	0065	0020	31691	690 C	2545	14467

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1680 B	29439		2133	15063	0000	00000	6475
0010	1610	29612		2162	15045	0064	00003	6201
0020	0949	30893		2386	14836	0115	00011	4061
0030	0468	31292		2480	14652	0151	00020	3161
0050	0025	31704		2546	14467	0208	00042	2526

C-REF-NO 001	YR 1964	DEPTH 68	WAVES 1 18X1	AIR T 16.3	VIS 6
CONS. NO 070	MONTH 8	MXSAMPD 01	WAVES 2 18X1	WET B 16.0	STN 081
LAT 46-500N	DAY 07	NO.DPTH 10	WND-DIR 180	WW-CODE 20	
LON 61-450W	HR 13.2	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
134	0000	160 B	30389		2223	15049
134	0010	1563	30374	600 C	2230	15039
134	0015	1436	30424		2261	15000
134	0020	0468	31407		2489	14652
134	0025	0227	31559		2522	14552
134	0030	0156	31599	710 C	2530	14521
134	0040	0032	31678		2544	14468
134	0050	0002	31741	700 C	2550	14457
134	0060	-0003	31910		2564	14459
134	0065	-0001	31917	680 C	2564	14460

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1600 B	30389		2223	15049	0000	00000	5608
0010	1563	30374		2230	15039	0056	00003	5544
0020	0468	31407		2489	14652	0099	00009	3074
0030	0156	31599		2530	14521	0128	00016	2677
0050	0002	31741		2550	14457	0180	00037	2488

C-REF-NO 001	YR 1964	DEPTH 55	WAVES 1 18X1	AIR T 16.5	VIS 6
CONS. NO 071	MONTH 8	MXSAMPD 00	WAVES 2 18X1	WET B 16.0	STN 082
LAT 46-500N	DAY 07	NO.DPTH 8	WND-DIR 180	WW-CODE 03	
LON 61-300W	HR 14.4	W-COLOR	WND-SPD 01	CLD-TPE 6	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
145	0000	160 B	30275		2215	15048
145	0010	1517	30246	620 C	2230	15023
145	0015	0404	31371		2492	14624
145	0020	0180	31558		2526	14530
145	0025	0060	31605		2536	14477
145	0030	0062	31664	740 C	2541	14480
145	0040	-0004	31698		2547	14452
145	0050	-0009	32827	740 C	2638	14467

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1600 B	30275		2215	15048	0000	00000	5692
0010	1517	30246		2230	15023	0056	00003	5543
0020	0180	31558		2526	14530	0098	00008	2723
0030	0062	31664		2541	14480	0125	00015	2575
0050	-0009	32827		2638	14467	0167	00032	1653

C-REF-NO 001	YR 1964	DEPTH 57	WAVES 1 19X1	AIR T 16.5	VIS 5
CONS. NO 072	MONTH 8	MXSAMPD 01	WAVES 2 19X1	WET B 16.0	STN 083
LAT 46-500N	DAY 07	NO.DPTH 9	WND-DIR 190	WW-CODE 01	
LON 61-150W	HR 15.6	W-COLOR	WND-SPD 04	CLD-TPE 6	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
158	0000	165 B	29990		2182	15060
158	0010	1624	29986	610 C	2187	15054
158	0015	0616	31266		2461	14710
158	0020	0332	31479		2508	14595
158	0025	0092 B	31567	780 C	2532	14491
158	0030	0054	31641		2540	14476
158	0040	0004	31707	740 C	2547	14456
158	0050	0019	31994		2570	14468
158	0055	0038	32379	690 C	2600	14483

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1650 B	29990		2182	15060	0000	00000	6007
0010	1624	29986		2187	15054	0060	00003	5957
0020	0332	31479		2508	14595	0104	00009	2896
0030	0054	31641		2540	14476	0132	00016	2589
0050	0019	31994		2570	14468	0181	00036	2302

C-REF-NO 001 YR 1964 DEPTH 124 WAVES 1 16X1 AIR T 16.7 VIS 5
 CONS. NO 073 MONTH 8 MXSAMPD 01 WAVES 2 16X1 WET B 16.1 STN 084
 LAT 46-501N DAY 07 NO.DPTH 12 WND-DIR 160 WW-CODE
 LON 61-003W HR 16.8 W-COLOR WND-SPD 04 CLD-TPE
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1018.0 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
172	0000	166 B	29909		2173	15062
172	0010	1595	29853	620 C	2183	15043
172	0014	0797 B	30614		2386	14773
172	0019	0593	30974		2441	14698
172	0024	0348	31241		2487	14600
172	0029	0232 B	31348	770 C	2505	14552
172	0038	0068	31587		2535	14483
172	0048	-0006	31710		2548	14452
172	0057	0001	31916		2564	14460
172	0072	0032	32299	680 C	2594	14482
172	0096	0086	32825		2633	14518
172	0119	0152	33223	580 C	2661	14557

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1660 B	29909		2173	15062	0000	00000	6088
0010	1595	29853		2183	15043	0061	00003	5993
0020	0540 B	31038		2452	14677	0108	00010	3427
0030	0210 B	31376		2509	14542	0140	00018	2881
0050	-0008	31751		2551	14452	0193	00039	2476
0075	0038	32371		2599	14486	0250	00075	2023
0100	0098	32901		2638	14525	0296	00116	1652

C-REF-NO 001	YR 1964	DEPTH 27	WAVES 1 27X0	AIR T 17.0	VIS 4
CONS. NO 074	MONTH 8	MXSAMPD 00	WAVES 2 27X1	WET B 16.2	STN 085
LAT 46-502N	DAY 07	NO.DPTH 6	WNO-DIR 270	WW-CODE 41	
LON 60-502W	HR 17.8	W-COLOR	WNO-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.2	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
181	0000	169 B	29860		2163	15071
181	0005	1668	29853	590 C	2167	15065
181	0010	1536	29882		2198	15025
181	0015	1484	29923	600 C	2212	15009
181	0020	1080	30223		2312	14875
181	0025	0752	30550	660 C	2387	14757

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1690 B	29860		2163	15071	0000	00000	6188
0010	1536	29882		2198	15025	0060	00003	5849
0020	1080	30223		2312	14875	0114	00011	4762

C-REF-NO 001	YR 1964	DEPTH 102	WAVES 1 00X0	AIR T 17.6	VIS 5
CONS. NO 077	MONTH 8	MXSAMPD 01	WAVES 2 27X1	WET B 16.5	STN 088
LAT 47-005N	DAY 07	NO.DPTH 11	WND-DIR CALM	WW-CODE 40	
LON 60-593W	HR 21.2	W-COLOR	WND-SPD 00	CLD-TPE 7	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
214	0000	170 B	29794		2155	15073
214	0010	1630	29899	590 C	2179	15054
214	0015	1184	30576		2321	14916
214	0020	0687 D	31230		2449	14739
214	0025	0238	31663		2530	14558
214	0030	0072 B	31875	710 C	2557	14487
214	0040	0042	31961		2566	14477
214	0050	0032	32100		2578	14476
214	0060	0034	32361	700 C	2598	14482
214	0075	0036	32335		2596	14485
214	0100	0053	32681	680 C	2623	14501

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1700 B	29794		2155	15073	0000	00000	6259
0010	1630	29899		2179	15054	0062	00003	6033
0020	0687 D	31230		2449	14739	0109	00010	3451
0030	0072 B	31875		2557	14487	0139	00017	2419
0050	0032	32100		2578	14476	0185	00036	2227
0075	0036	32335		2596	14485	0239	00070	2049
0100	0053	32681		2623	14501	0288	00113	1793

C-REF-NO 001	YR 1964	DEPTH 146	WAVES 1 27X0	AIR T 17.2	VIS 4
CONS. NO 076	MONTH 8	MXSAMPD 01	WAVES 2 27X0	WET B 16.5	STN 087
LAT 47-006N	DAY 07	NO.DPTH 13	WND-DIR 270	WW-CODE 01	
LON 60-440W	HR 19.7	W-COLOR	WND-SPD 01	CLD-TPE 7	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
199	0000	172 B	29847		2155	15080
199	0010	1594	29802	600 C	2180	15042
199	0015	1029	30599		2350	14861
199	0020	0628	30765		2420	14709
199	0025	0390	30903		2457	14613
199	0030	0388	31304	730 C	2489	14619
199	0040	0110	31477		2523	14501
199	0050	0042	31617		2538	14473
199	0060	-0016	31743		2551	14450
199	0074	0022	32410	720 C	2603	14479
199	0099	0066	32664		2621	14507
199	0124	0140	33260		2664	14553
199	0139	0184	33435	550 C	2675	14577

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1720 B	29847		2155	15080	0000	00000	6264
0010	1594	29802		2180	15042	0062	00003	6028
0020	0628	30765		2420	14709	0111	00010	3728
0030	0388	31304		2489	14619	0145	00019	3077
0050	0042	31617		2538	14473	0202	00041	2600
0075	0024	3243 C		2604	14480	0259	00077	1972
0100	0069	3269 B		2623	14509	0307	00120	1796
0125	0139	3319 I		2659	14552	0348	00166	1456

C-REF-NO 001	YR 1964	DEPTH 102	WAVES 1 00X0	AIR T 17.6	VIS 5
CONS. NO 077	MONTH 8	MXSAMPD 01	WAVES 2 27X1	WET B 16.5	STN 088
LAT 47-005N	DAY 07	NO.DPTH 11	WND-DIR CALM	WW-CODE 40	
LON 60-593W	HR 21.2	W-COLOR	WND-SPD 00	CLD-TPE 7	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
214	0000	170 B	29794		2155	15073
214	0010	1630	29899	590 C	2179	15054
214	0015	1184	30576		2321	14916
214	0020	0687 D	31230		2449	14739
214	0025	0238	31663		2530	14558
214	0030	0072 B	31875	710 C	2557	14487
214	0040	0042	31961		2566	14477
214	0050	0032	32100		2578	14476
214	0060	0034	32361	700 C	2598	14482
214	0075	0036	32335		2596	14485
214	0100	0053	32681	680 C	2623	14501

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1700 B	29794		2155	15073	0000	00000	6259
0010	1630	29899		2179	15054	0062	00003	6033
0020	0687 D	31230		2449	14739	0109	00010	3451
0030	0072 B	31875		2557	14487	0139	00017	2419
0050	0032	32100		2578	14476	0185	00036	2227
0075	0036	32335		2596	14485	0239	00070	2049
0100	0053	32681		2623	14501	0288	00113	1793

C-REF-NO 001	YR 1964	DEPTH 48	WAVES 1 00X0	AIR T 16.9	VIS 6
CONS. NO 078	MONTH 8	MXSAMPD 00	WAVES 2 27X1	WET B 15.6	STN 089
LAT 47-003N	DAY 07	NO.DPTH 8	WNC-DIR CALM	WW-CODE 02	
LON 61-149W	HR 22.4	W-COLOR	WND-SPD 00	CLD-TPE 7	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
228	0000	165 B	30312		2206	15064
228	0010	1535	30362	620 C	2235	15030
228	0015	0472	31602		2504	14656
228	0020	0316	31650		2523	14591
228	0025	0242	31715		2534	14560
228	0030	0197	31754	700 C	2540	14542
228	0040	0120	31846		2552	14510
228	0045	0082	31915	690 C	2560	14495

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1650 B	30312		2206	15064	0000	00000	5771
0010	1535	30362		2235	15030	0056	00003	5495
0020	0316	31650		2523	14591	0098	00008	2753
0030	0197	31754		2540	14542	0125	00015	2586

C-REF-NO 001	YR 1964	DEPTH 41	WAVES 1 00X0	AIR T 16.1	VIS 8
CONS. NO 079	MONTH 8	MXSAMPD 00	WAVES 2 00X0	WET B 14.4	STN 090
LAT 46-598N	DAY 08	NO.DPTH 7	WND-DIR CALM	WW-CODE	
LON 61-300W	HR 00.0	W-COLOR	WND-SPD 00	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
000	0000	163 B	30387		2216	15059
000	0010	1529	30382	620 C	2238	15028
000	0015	1480	30413		2251	15014
000	0020	0653	31193		2451	14725
000	0025	0600 B	31250	680 C	2462	14705
000	0030	0368	31558		2511	14614
000	0040	0250	31697	680 C	2532	14566

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1630 B	30387		2216	15059	0000	00000	5673
0010	1529	30382		2238	15028	0056	00003	5468
0020	0653	31193		2451	14725	0101	00009	3437
0030	0368	31558		2511	14614	0132	00017	2867

C-REF-NO 001	YR 1964	DEPTH 38	WAVES 1 00X0	AIR T 16.2	VIS 6
CONS. NO 080	MONTH 8	MXSAMPD 00	WAVES 2 00X0	WET B 14.2	STN 091
LAT 46-597N	DAY 08	NO.DPTH 7	WND-DIR CALM	WW-CODE	
LON 61-450W	HR 00.9	W-COLOR	WND-SPD 00	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
011	0000	170 B	30382		2200	15080
011	0010	1539	30401	630 C	2237	15032
011	0015	1514	30436		2245	15025
011	0020	0838	30927	670 C	2405	14794
011	0025	0762 B	31040		2425	14767
011	0030	0610	31242		2460	14710
011	0035	0505	31352	660 C	2481	14669

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1700 B	30382		2200	15080	0000	00000	5829
0010	1539	30401		2237	15032	0057	00003	5475
0020	0838	30927		2405	14794	0104	00010	3875
0030	0610	31242		2460	14710	0140	00019	3351

C-REF-NO 001	YR 1964	DEPTH 46	WAVES 1 00X0	AIR T 16.5	VIS 8
CONS. NO 081	MONTH 8	MXSAMPD 00	WAVES 2 00X0	WET B 15.0	STN 092
LAT 47-000N	DAY 08	NO.DPTH 8	WND-DIR CALM	WW-CODE 00	
LON 62-000W	HR 02.0	W-COLOR	WND-SPD 00	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
022	0000	172 B	29834		2154	15080
022	0010	1632	29839	620 C	2174	15054
022	0015	1517	30076		2217	15022
022	0020	1084	30879		2362	14885
022	0025	0622 C	31239	670 C	2458	14714
022	0030	0392 B	31456		2500	14622
022	0040	0127	31630		2535	14511
022	0045	0116 B	31623	690 C	2535	14506

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1720 B	29834		2154	15080	0000.	00000	6273
0010	1632	29839		2174	15054	0062	00003	6081
0020	1084	30879		2362	14885	0114	00011	4283
0030	0392 B	31456		2500	14622	0150	00020	2966

C-REF-NO 001 YR 1964 DEPTH 31 WAVES 1 27X0 AIR T 15.8 VIS 8
 CONS. NO 082 MONTH 8 MXSAMPD 00 WAVES 2 27X1 WET B 15.0 STN 094
 LAT 47-101N DAY 08 NO.DPTH 6 WND-DIR 270 WW-CODE 02
 LON 62-000W HR 05.9 W-COLOR WND-SPD 02 CLD-TPE X
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1017.7 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
060	0000	162 B	30244		2208	15054
060	0010	1615	30232	600 C	2208	15054
060	0015	1507	30220		2230	15020
060	0020	1438	30305		2251	15000
060	0025	1257 B	30469		2299	14942
060	0030	0816	30998	630 C	2414	14788

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1620 B	30244		2208	15054	0000	00000	5757
0010	1615	30232		2208	15054	0058	00003	5757
0020	1438	30305		2251	15000	0113	00011	5344
0030	0816	30998		2414	14788	0159	00023	3793

C-REF-NO 001	YR 1964	DEPTH 27	WAVES 1 27X0	AIR T 15.9	VIS 8
CONS. NO 083	MONTH 8	MXSAMPD 00	WAVES 2 27X1	WET B 15.0	STN 095
LAT 47-103N	DAY 08	NO.DPTH 5	WND-DIR 270	WW-CODE 02	
LON 61-455W	HR 07.1	W-COLOR	WND-SPD 02	CLD-TPE X	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
072	0000	162 B	30229		2207	15054
072	0010	1510	30211	620 C	2229	15020
072	0015	1410	30275		2255	14989
072	0020	1341	30327		2272	14968
072	0025	1312	30370	600 C	2281	14959

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1620 B	30229		2207	15054	0000	00000	5768
0010	1510	30211		2229	15020	0057	00003	5555
0020	1341	30327		2272	14968	0110	00011	5142

C-REF-NO 001	YR 1964	DEPTH 27	WAVES 1 27X0	AIR T 16.0	VIS 8
CONS. NO 084	MONTH 8	MXSAMPD 00	WAVES 2 27X1	WET B 15.2	STN 096
LAT 47-105N	DAY 08	NO.DPTH 5	WND-DIR 180	WW-CODE 02	
LON 61-300W	HR 08.2	W-COLOR	WND-SPD 01	CLD-TPE 7	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
084	0000	163 B	30418		2219	15059
084	0010	1607	30397	590 C	2222	15053
084	0015	1544	30420		2238	15034
084	0020	0975	31095		2397	14848
084	0025	0320	31599	690 C	2518	14593

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1630 B	30418		2219	15059	0000	00000	5651
0010	1607	30397		2222	15053	0057	00003	5620
0020	0975	31095		2397	14848	0105	00010	3950

C-REF-NO 001	YR 1964	DEPTH 44	WAVES 1 18X0	AIR T 16.0	VIS 8
CONS. NO 085	MONTH 8	MXSAMPD 00	WAVES 2 18X1	WET B 15.6	STN 097
LAT 47-100N	DAY 08	NO.DPTH 7	WND-DIR 180	WW-CODE 01	
LON 61-140W	HR 09.2	W-COLOR	WND-SPD 01	CLD-TPE 3	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
094	0000	159 B	30495		2234	15047
094	0010	1558	30474	600 C	2239	15039
094	0015	1456	30500		2263	15007
094	0020	0458	31550		2501	14650
094	0025	0269	31794		2538	14573
094	0030	0087	31806	720 C	2551	14493
094	0040	0045	31995	670 C	2569	14478

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1590 B	30495		2234	15047	0000	00000	5509
0010	1558	30474		2239	15039	0055	00003	5461
0020	0458	31550		2501	14650	0097	00009	2957
0030	0087	31806		2551	14493	0125	00016	2480

C-REF-NO 001	YR 1964	DEPTH 82	WAVES 1 18X0	AIR T 16.1	VIS 8
CONS. NO 086	MONTH 8	MXSAMPD 01	WAVES 2 18X1	WET B 15.2	STN 098
LAT 47-103N	DAY 08	NO.DPTH 10	WND-DIR 180	WW-CODE 01	
LON 60-596W	HR 10.4	W-COLOR	WND-SPD 01	CLD-TPE 4	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.0	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
106	0000	163 B	30152		2198	15056
106	0010	1441	30463	600 C	2263	15001
106	0015	0697	31195		2445	14742
106	0020	0372	31447		2501	14612
106	0025	0299	31631		2522	14584
106	0030	0126	31836	740 C	2551	14511
106	0040	0027	32077		2576	14471
106	0050	0032	32395	690 C	2601	14480
106	0060	0029	32408		2603	14480
106	0075	0032	32447	700 C	2605	14484

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1630 B	30152		2198	15056	0000	00000	5845
0010	1441	30463		2263	15001	0056	00003	5232
0020	0372	31447		2501	14612	0097	00008	2954
0030	0126	31836		2551	14511	0124	00015	2479
0050	0032	32395		2601	14480	0169	00033	2002
0075	0032	32447		2605	14484	0219	00065	1961

C-REF-NO 001	YR 1964	DEPTH 110	WAVES 1 13X0	AIR T 17.1	VIS 8
CONS. NO 087	MONTH 8	MXSAMPD 01	WAVES 2 13X1	WET B 15.6	STN 099
LAT 47-106N	DAY 08	NO.DPTH 11	WND-DIR 130	WW-CODE	
LON 60-447W	HR 11.6	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
118	0000	169 B	29763		2155	15070
118	0010	1666	29793	590 C	2163	15064
118	0015	1604	29840		2180	15046
118	0020	0890	30756		2384	14812
118	0025	0504 B	31405	770 C	2485	14668
118	0030	0138	31586		2531	14513
118	0040	-0016 B	31750		2552	14447
118	0050	0033	32190	750 C	2585	14477
118	0060	0034	32552		2614	14484
118	0075	0038	32682	740 C	2624	14490
118	0100	0089	33077	670 C	2653	14523

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1690 B	29763		2155	15070	0000	00000	6259
0010	1666	29793		2163	15064	0062	00003	6188
0020	0890	30756		2384	14812	0114	00011	4076
0030	0138	31586		2531	14513	0148	00019	2676
0050	0033	32190		2585	14477	0196	00038	2159
0075	0038	32682		2624	14490	0246	00069	1785
0100	0089	33077		2653	14523	0288	00106	1512

C-REF-NO 001	YR 1964	DEPTH	100	WAVES 1 27X1	AIR T 15.0	VIS 8
CONS. NO 088	MONTH 8	MXSAMPD	01	WAVES 2 27X2	WET B	STN 100
LAT 47-247N	DAY 11	NO.DPTH	1	WND-DIR 270	WW-CODE	
LON 60-196W	HR 04.7	W-COLOR		WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1012.3	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
047	0095	0052	32800		2633	14502

C-REF-NO 001	YR 1964	DEPTH 110	WAVES 1 24X2	AIR T 15.6	VIS 8
CONS. NO 089	MONTH 8	MXSAMPD 01	WAVES 2 24X2	WET B	SYN 101
LAT 47-324N	DAY 11	NO.DPTH 1	WND-DIR 240	WW-CODE	
LON 60-290W	HR 06.6	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1012.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
066	0091	0094	33124		2656	14525

C-REF-NO 001	YR 1964	DEPTH	54	WAVES 1 24X2	AIR T 15.6	VIS 8
CONS. NO 090	MONTH 8	MXSAMPD	00	WAVES 2 24X2	WET B	STN 102
LAT 47-380N	DAY 11	NO.DPTH	1	WND-DIR 240	WW-CODE	
LON 60-480W	HR 07.8	W-COLOR		WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1012.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
078	0049	0025	31911		2563	14470

C-REF-NO 001	YR 1964	DEPTH 61	WAVES 1 25X2	AIR T 15.6	VIS 8
CONS. NO 091	MONTH 8	MXSAMPD 01	WAVES 2 25X3	WET B	STN 103
LAT 47-520N	DAY 11	NO.DPTH 1	WND-DIR 250	WW-CODE	
LON 61-045W	HR 10.5	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1013.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
105	0056	-0026	32166		2585	14451

C-REF-NO 001	YR 1964	DEPTH 62	WAVES 1 28X2	AIR T 16.1	VIS 8
CONS. NO 092	MONTH 8	MXSAMPD 01	WAVES 2 28X3	WET B	STN 104
LAT 47-590N	DAY 11	NO.DPTH 1	WND-DIR 280	WW-CODE	
LON 61-265W	HR 12.8	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1015.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
128	0057	-0026	32157		2585	14451

C-REF-NO 001	YR 1964	DEPTH 63	WAVES 1 28X2	AIR T 15.0	VIS 8
CONS. NO 093	MONTH 8	MXSAMPD 01	WAVES 2 28X3	WET B	STN 105
LAT 47-590N	DAY 11	NO.DPTH 1	WND-DIR 280	WW-CODE	
LON 61-590W	HR 15.5	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1015.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
155	0056	-0014	32062		2577	14455

C-REF-NO 001	YR 1964	DEPTH 83	WAVES 1 28X3	AIR T 15.6	VIS 8
CONS. NO 094	MONTH 8	MXSAMPD 01	WAVES 2 28X3	WET B	STN 106
LAT 48-058N	DAY 11	NO.DPTH 1	WND-DIR 280	WW-CODE	
LON 62-150W	HR 17.2	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1016.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
172	0077	-0024	32459		2609	14459

C-REF-NO 001	YR 1964	DEPTH 67	WAVES 1 28X3	AIR T 16.1	VIS 8
CONS. NO 095	MONTH 8	MXSAMPD 01	WAVES 2 28X3	WET B	STN 107
LAT 48-079N	DAY 11	NO.DPTH 1	WND-DIR 280	WW-CODE	
LON 62-250W	HR 18.4	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1016.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
184	0062	-0010				

C-REF-NO 001	YR 1964	DEPTH	74	WAVES 1 27X3	AIR T 16.1	VIS 8
CONS. NO 096	MONTH 8	MXSAMPD	01	WAVES 2 27X3	WET B	STN 108
LAT 48-100N	DAY 11	NO.DPTH	1	WND-DIR 270	WW-CODE	
LON 62-321W	HR 19.4	W-COLOR		WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1016.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
194	0069	-0029	32369		2602	14454

C-REF-NO 001	YR 1964	DEPTH 84	WAVES 1 24X2	AIR T 16.1	VIS 8
CONS. NO 097	MONTH 8	MXSAMPD 01	WAVES 2 27X2	WET B	STN 110
LAT 48-185N	DAY 11	NO.DPTH 1	WND-DIR 240	WW-CODE	
LON 62-519W	HR 21.5	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
215	0079	-0023	32576		2618	14462

C-REF-NO 001	YR 1964	DEPTH 60	WAVES 1 18X1	AIR T 16.1	VIS 8
CONS. NO 098	MONTH 8	MXSAMPD 01	WAVES 2 18X2	WET 8	STN 111
LAT 48-250N	DAY 11	NO.DPTH 1	WND-DIR 180	WW-CODE	
LON 63-095W	HR 23.0	W-COLOR	WND-SPD 01	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
230	0055	-0020 B	32134		2583	14453

C-REF-NO 001	YR 1964	DEPTH 124	WAVES 1 07X1	AIR T 13.9	VIS 8
CONS. NO 099	MONTH 8	MXSAMPD 01	WAVES 2 07X1	WET B	STN 112
LAT 48-310N	DAY 12	NO.DPTH 1	WND-DIR 070	WW-CODE	
LON 63-313W	HR 02.1	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
021	0119	0142	33287		2666	14553

C-REF-NO 001	YR 1964	DEPTH 41	WAVES 1 09X2	AIR T 13.9	VIS 5
CONS. NO 100	MONTH 8	MXSAMPD 00	WAVES 2 09X2	WET B	STN 113
LAT 49-000N	DAY 12	NO.DPTH 1	WNO-DIR 090	WW-CODE	
LON 68-285W	HR 20.0	W-COLOR	WNO-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
200	0036	0099	31711		2543	14498

C-REF-NO 001	YR 1964	DEPTH 151	WAVES 1 09X2	AIR T 13.9	VIS 5
CONS. NO 101	MONTH 8	MXSAMPD 01	WAVES 2 09X2	WET B	STN 114
LAT 48-588N	DAY 12	NO.DPTH 1	WND-DIR 090	WW-CODE	
LON 68-275W	HR 20.7	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
207	0146	0105	33116		2655	14539

C-REF-NO 001	YR 1964	DEPTH 200	WAVES 1 09X2	AIR T 13.9	VIS 5
CONS. NO 102	MONTH 8	MXSAMPD 02	WAVES 2 09X2	WET B	STN 115
LAT 48-560N	DAY 12	NO.DPTH 1	WND-DIR 090	WW-CODE	
LON 68-256W	HR 21.5	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
215	0195	0288	33847		2700	14637

C-REF-NO 001	YR 1964	DEPTH 352	WAVES 1 09X2	AIR T 12.2	VIS 6
CONS. NO 103	MONTH 8	MXSAMPD 03	WAVES 2 09X2	WET 8	STN 116
LAT 48-525N	DAY 12	NO.DPTH 1	WND-DIR 090	WW-CODE	
LON 68-215W	HR 22.5	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
225	0335	0452	34517		2737	14739

C-REF-NO 001	YR 1964	DEPTH 365	WAVES 1 09X2	AIR T 11.7	VIS 6
CONS. NO 104	MONTH 8	MXSAMPD 04	WAVES 2 09X2	WET B	STN 117
LAT 48-504N	DAY 12	NO.DPTH 1	WND-DIR 090	WW-CODE	
LON 68-195W	HR 23.6	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1003.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
236	0360	0448	34510		2737	14741

C-REF-NO 001	YR 1964	DEPTH 295	WAVES 1 13X1	AIR T 10.6	VIS 5
CONS. NO 105	MONTH 8	MXSAMPD 03	WAVES 2 13X2	WET B	STN 118
LAT 48-454N	DAY 13	NO.DPTH 1	WND-DIR 130	WW-CODE	
LON 68-155W	HR 00.4	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
004	0290	0438	34466		2734	14725

C-REF-NO 001	YR 1964	DEPTH 200	WAVES 1 13X1	AIR T 16.7	VIS 5
CONS. NO 106	MONTH 8	MXSAMPD 02	WAVES 2 13X1	WET B	STN 119
LAT 48-444N	DAY 13	NO.DPTH 1	WND-DIR 130	WW-CODE	
LON 68-133W	HR 00.9	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
009	0195	0347	34074		2712	14666

C-REF-NO 001	YR 1964	DEPTH 125	WAVES 1 16X1	AIR T 16.7	VIS 5
CONS. NO 107	MONTH 8	MXSAMPD 01	WAVES 2 16X2	WET B	SYN 120
LAT 48-430N	DAY 13	NO.DPTH 1	WND-DIR 160	WW-CODE	
LON 68-110W	HR 01.4	W-COLOR	WND-SPD 07	CLO-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLO-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
014	0120	0203	33458		2676	14583

C-REF-NO 001	YR 1964	DEPTH	58	WAVES 1 16X1	AIR T 16.7	VIS 5
CONS. NO 108	MONTH 8	MXSAMPD	01	WAVES 2 16X1	WET B.	STN 121
LAT 48-415N	DAY 13	NO.DPTH	1	WND-DIR 160	WW-CODE	
LON 68-105W	HR 01.8	W-COLOR		WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
018	0053	0241	30831		2463	14552

C-REF-NO 001	YR 1964	DEPTH 24	WAVES 1 16X1	AIR T 18.9	VIS 5
CONS. NO 109	MONTH 8	MXSAMPD 00	WAVES 2 16X1	WET B	STN 122
LAT 48-400N	DAY 13	NO.DPTH 1	WND-DIR 160	WW-CODE	
LON 68-110W	HR 02.2	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
022	0019	0465	29211		2316	14622

C-REF-NO 001	YR 1964	DEPTH 15	WAVES 1 16X1	AIR T 19.4	VIS 5
CONS. NO 110	MONTH 8	MXSAMPD 00	WAVES 2 16X1	WET B	STN 123
LAT 48-395N	DAY 13	NO.DPTH 1	WND-DIR 160	WW-CODE	
LON 68-090W	HR 02.6	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
026	0010	0626	28870		2271	14682

C-REF-NO 001	YR 1964	DEPTH	24	WAVES 1 36X0	AIR T 15.0	VIS 8
CONS. NO 111	MONTH 8	MXSAMPD	00	WAVES 2 36X1	WET B	STN 124
LAT 48-300N	DAY 13	NO.DPTH	1	WND-DIR 360	WW-CODE	
LON 68-360W	HR 04.4	W-COLOR		WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1002.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
044	0019	0438	29882	650 C	2371	14619

C-REF-NO 001	YR 1964	DEPTH	24	WAVES 1 36X0	AIR T 15.0	VIS 8
CONS. NO 112	MONTH 8	MXSAMPD	00	WAVES 2 36X1	WET B	STN 125
LAT 48-314N	DAY 13	NO.DPTH	1	WND-DIR 360	WW-CODE	
LON 68-375W	HR 05.3	W-COLOR		WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1002.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
053	0019	0424	29625	690 C	2352	14610

C-REF-NO 001	YR 1964	DEPTH	19	WAVES 1 23X3	AIR T 17.2	VIS 8
CONS. NO 113	MONTH 8	MXSAMPD	00	WAVES 2 23X2	WET B	SYN 126
LAT 48-223N	DAY 13	NO.DPTH	1	WND-DIR 230	WW-CODE	
LON 68-556W	HR 22.7	W-COLOR		WND-SPD 12	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1001.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
227	0014	0506		660 C		

C-REF-NO 001	YR 1964	DEPTH 103	WAVES 1 23X3	AIR T 15.6	VIS 8
CONS. NO 114	MONTH 8	MXSAMPD 01	WAVES 2 23X2	WET B	STN 127
LAT 48-253N	DAY 13	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 68-580W	HR 23.5	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1002.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
235	0080	0186	32035	580 C	2563	14549

C-REF-NO 001	YR 1964	DEPTH 146	WAVES 1 23X3	AIR T 15.6	VIS 8
CONS. NO 115	MONTH 8	MXSAMPD 01	WAVES 2 23X2	WET B	STN 128
LAT 48-255N	DAY 14	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 68-588W	HR 00.2	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
002	0100	0176	33213	480 C	2658	14564

C-REF-NO 001	YR 1964	DEPTH 335	WAVES 1 23X2	AIR T 15.6	VIS 8
CONS. NO 116	MONTH 8	MXSAMPD 02	WAVES 2 23X2	WET B	STN 129
LAT 48-272N	DAY 14	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 68-595W	HR 01.2	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
012	0233	0371		250 C		

C-REF-NO 001	YR 1964	DEPTH 336	WAVES 1 23X2	AIR T 10.0	VIS 8
CONS. NO 117	MONTH 8	MXSAMPD 03	WAVES 2 23X2	WET B	STN 130
LAT 48-296N	DAY 14	NO.DPTH I	WND-DIR 230	WW-CODE	
LON 69-030W	HR 02.2	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
022	0311	0438	34452	210 C	2733	14728

C-REF-NO 001	YR 1964	DEPTH 293	WAVES 1 23X1	AIR T 11.1	VIS 8
CONS. NO 118	MONTH 8	MXSAMPD 03	WAVES 2 23X1	WET B	STN 131
LAT 48-311N	DAY 14	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 69-044W	HR 02.9	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
029	0285	0436	34449	210 C	2733	14723

C-REF-NO 001	YR 1964	DEPTH	58	WAVES 1 32X1	AIR T 11.1	VIS 8
CONS. NO 119	MONTH 8	MXSAMPD	01	WAVES 2 32X1	WET B	STN 132
LAT 48-321N	DAY 14	NO.DPTH	1	WND-DIR 320	WW-CODE	
LON 69-064W	HR 03.5	W-COLOR		WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
035	0053	0017	32091	700 C	2578	14469

C-REF-NO 001	YR 1964	DEPTH 48	WAVES 1 32X0	AIR T 11.1	VIS 8
CONS. NO 120	MONTH 8	MXSAMPD 00	WAVES 2 32X1	WET B	STN 133
LAT 48-328N	DAY 14	NO.DPTH 1	WND-DIR 320	WW-CODE	
LON 69-073W	HR 04.2	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
042	0043	0130	31466	700 C	2521	14510

C-REF-NO 001	YR 1964	DEPTH 271	WAVES 1 30X0	AIR T 10.6	VIS 8
CONS. NO 121	MONTH 8	MXSAMPD 03	WAVES 2 30X1	WET B	STN 134
LAT 48-230N	DAY 14	NO.DPTH 1	WNC-DIR 300	WW-CODE	
LON 69-186W	HR 05.8	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
058	0266	0416	34365		2729	14711

C-REF-NO 001	YR 1964	DEPTH 311	WAVES 1 30X0	AIR T 10.6	VIS 8
CONS. NO 122	MONTH 8	MXSAMPD 03	WAVES 2 30X0	WET B	STN 135
LAT 48-218N	DAY 14	NO.DPTH 1	WND-DIR 300	WW-CODE	
LON 69-166W	HR 06.4	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
064	0306	0429 B	34412		2731	14723

C-REF-NO 001	YR 1964	DEPTH 182	WAVES 1 30X0	AIR T 10.6	VIS 8
CONS. NO 123	MONTH 8	MXSAMPD 02	WAVES 2 30X0	WET B	SRN 136
LAT 48-176N	DAY 14	NO.DPTH 1	WND-DIR 300	WW-CODE	
LON 69-108W	HR 07.4	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0177	0330	34010		2709	14655

C-REF-NO 001	YR 1964	DEPTH 44	WAVES 1 30X0	AIR T 10.6	VIS 8
CONS. NO 124	MONTH 8	MXSAMPD 00	WAVES 2 30X0	WET B	STN 137
LAT 48-170N	DAY 14	NO.DPTH 1	WND-DIR 300	WW-CODE	
LON 69-092W	HR 07.8	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
078	0039	0296	30631		2443	14572

C-REF-NO 001	YR 1964	DEPTH 34	WAVES 1 30X0	AIR T 10.6	VIS 8
CONS. NO 125	MONTH 8	MXSAMPD 00	WAVES 2 30X1	WET B	STN 138
LAT 48-157N	DAY 14	NO.DPTH 1	WNO-DIR 300	WW-CODE	
LON 69-084W	HR 08.5	W-COLOR	WNO-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
085	0029	0407	29628		2354	14604

C-REF-NO 001	YR 1964	DEPTH	29	WAVES 1 23X0	AIR T 10.0	VIS 8
CONS. NO 126	MONTH 8	MXSAMPD	00	WAVES 2 23X1	WET B	STN 139
LAT 48-065N	DAY 14	NO.DPTH	1	WND-DIR 230	WW-CODE	
LON 69-215W	HR 10.0	W-COLOR		WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
100	0024	0410	29492		2343	14603

C-REF-NO 001	YR 1964	DEPTH 71	WAVES 1 23X0	AIR T 09.4	VIS 8
CONS. NO 127	MONTH 8	MXSAMPD 01	WAVES 2 23X1	WET B	STN 140
LAT 48-087N	DAY 14	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 69-244W	HR 10.7	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
107	0066	0254	30731		2454	14559

C-REF-NO 001	YR 1964	DEPTH 61	WAVES 1 23X0	AIR T 09.4	VIS 8
CONS. NO 128	MONTH 8	MXSAMPD 01	WAVES 2 23X1	WET B	STN 141
LAT 48-098N	DAY 14	NO.DPTH 1	WNC-DIR 230	WW-CODE	
LON 69-266W	HR 11.3	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
113	0056	0038	32784		2632	14489

C-REF-NO 001	YR 1964	DEPTH 230	WAVES 1	XX	AIR T 09.4	VIS
CONS. NO 129	MONTH 8	MXSAMPD 02	WAVES 2	XX	WET B	SYN 142
LAT 48-105N	DAY 14	NO.DPTH 1	WND-DIR		WW-CODE	
LON 69-293W	HR 12.0	W-COLOR	WND-SPD		CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0		CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
120	0225	0376	34210		2720	14685

C-REF-NO 001	YR 1964	DEPTH 280	WAVES 1	XX	AIR T	VIS
CONS. NO 130	MONTH 8	MXSAMPD 03	WAVES 2	XX	WET B	STN 143
LAT 48-128N	DAY 14	NO.DPTH 12	WND-DIR		WW-CODE	
LON 69-305W	HR 12.3	W-COLOR	WND-SPD		CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO		CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
126	0000	042 B	30126	680 C	2392	14612
126	0010	0202	31255	660 C	2500	14534
126	0020	0136	31688	670 C	2539	14512
126	0030	0030	32082	710 C	2576	14471
126	0050	-0021	32356	710 C	2601	14455
126	0075	-0016	32530	690 C	2614	14464
126	0100	0044 F	32904	580 C	2642	14500
126	0125	0225	33593	390 C	2685	14595
126	0150	0268	33758	350 C	2694	14620
126	0200	0339	34061	280 C	2712	14663
126	0250	0400	34301	220 C	2725	14700
129	0260	0397	34316	250 C	2727	14701

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0420 B	30126		2392	14612	0000	00000	3994
0010	0202	31255		2500	14534	0035	00002	2968
0020	0136	31688		2539	14512	0063	00006	2597
0030	0030	32082		2576	14471	0087	00012	2240
0050	-0021	32356		2601	14455	0130	00029	2008
0075	-0016	32530		2614	14464	0179	00060	1876
0100	0044 F	32904		2642	14500	0223	00099	1619
0125	0225	33593		2685	14595	0259	00140	1215
0150	0268	33758		2694	14620	0288	00181	1127
0175	0305	33916		2704	14642	0315	00227	1042
0200	0339	34061		2712	14663	0341	00276	0966
0225	0378 B	3420 C		2720	14686	0364	00327	0900
0250	0400	34301		2725	14700	0386	00380	0850

C-REF-NO 001	YR 1964	DEPTH 32	WAVES 1	XX	AIR T	VIS
CONS. NO 131	MONTH 8	MXSAMPD 00	WAVES 2	XX	WET B	STN 144
LAT 48-135N	DAY 14	NO.DPTH 1	WND-DIR		WW-CODE	
LON 69-315W	HR 13.8	W-COLOR	WND-SPD		CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO		CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
138	0027	0004				

C-REF-NO 001	YR 1964	DEPTH 80	WAVES 1 27X1	AIR T 09.4	VIS 8
CONS. NO 132	MONTH 8	MXSAMPD 01	WAVES 2 27X1	WET B	STN 145
LAT 48-072N	DAY 14	NO.DPTH 1	WND-DIR 270	WW-CODE	
LON 69-402W	HR 14.9	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0057	0368				

C-REF-NO 001	YR 1964	DEPTH		WAVES 1 28X1	AIR T 11.1	VIS 8
CONS. NO 133	MONTH 8	MXSAMPD	01	WAVES 2 28X1	WET B	STN 146
LAT 48-087N	DAY 14	NO.DPTH	9	WND-DIR 280	WW-CODE	
LON 69-478W	HR 17.4	W-COLOR		WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
174	0000	089 B	19590		1515	14667
174	0009	0706 B	22944	660 C	1798	14638
174	0017	0437	28207	680 C	2239	14596
174	0026	0414 B	28662	680 C	2277	14594
174	0043	0374	29426	680 C	2341	14590
174	0065	0364	29563		2353	14591
174	0087	0345	29924	680 C	2383	14591
174	0108	0336	30114	690 C	2399	14593
174	0130	0320	30218	690 C	2408	14591

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0890 B	19590		1515	14667	0000	00000	12437
0010	0669 C	2367 I		1859	14632	0107	00005	9111
0020	0413 D	2868 I		2279	14593	0179	00014	5079
0030	0403 B	2887 E		2295	14593	0229	00027	4926
0050	0369	2951 I		2348	14590	0323	00065	4416
0075	0355	2972 E		2366	14591	0431	00134	4244
0100	0339	30056		2394	14592	0535	00226	3980
0125	0323	30208		2407	14592	0633	00339	3851

C-REF-NO 001	YR 1964	DEPTH 152	WAVES 1 28X0	AIR T 11.7	VIS 8
CONS. NO 134	MONTH 8	MXSAMPD 01	WAVES 2 28X0	WET B	STN 147
LAT 48-146N	DAY 14	NC.DPTH 9	WND-DIR 280	WW-CODE	
LON 69-535W	HR 19.8	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
201	0000	124 B	15880		1179	14754
201	0009	1056		660 C		
201	0019	0586	24779	650 C	1954	14614
201	0028	0344	28756	660 C	2290	14565
201	0047	0306 B	29249	660 C	2332	14559
201	0070	0308	29538	660 C	2355	14567
201	0094	0310		680 C		
201	0117	0312	29973	680 C	2390	14582
201	0132	0312	29983	640 C	2390	14585

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1240 B	15880		1179	14754	0000	00000	15707
0010	1011 C	2165 I		1658	14741	0133	00006	11045
0020	0551	2528 I		1997	14606	0227	00019	7774
0030	0324 C	2907 I		2316	14561	0290	00034	4717
0050	0305 B	2930 B		2336	14559	0382	00072	4526
0075	0308	2960 B		2360	14569	0493	00142	4297
0100	0311	2986 E		2381	14577	0599	00236	4102
0125	0312	2997 C		2389	14584	0701	00353	4022

C-REF-NO 001	YR 1964	DEPTH 187	WAVES 1 28X0	AIR T 12.2	VIS 8
CONS. NO 135	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B	STN 148
LAT 48-153N	DAY 14	NO.DPTH 10	WND-DIR 280	WW-CODE	
LON 70-030W	HR 21.1	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 152	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
216	0000	123 B	12690		0934	14712
216	0009	0864	18860	650 C	1461	14649
216	0018	0418	27333	660 C	2171	14577
216	0027	0332	28363	670 C	2260	14555
216	0045	0278	28955	660 C	2311	14542
216	0068	0281	29381	650 C	2345	14553
216	0091	0280	29683	660 C	2369	14560
216	0113	0271	29917	670 C	2388	14563
216	0136	0275	30118	660 C	2404	14571
216	0154	0199	30286	660 C	2423	14543

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1230 B	12690		0934	14712	0000	00000	18099
0010	0808 C	1993 I		1551	14641	0150	00006	12086
0020	0382 C	2791 I		2220	14569	0239	00018	5642
0030	0316	2854 I		2275	14550	0292	00031	5111
0050	0275	2907 B		2320	14543	0391	00071	4678
0075	0281	29483		2353	14555	0504	00143	4368
0100	0276	29784		2377	14561	0611	00238	4135
0125	0279 B	30024		2396	14570	0713	00355	3957
0150	0214	30251		2419	14549	0809	00490	3737

C-REF-NO 001	YR 1964	DEPTH		WAVES 1 27X1	AIR T 14.4	VIS 8
CONS. NO 136	MONTH 8	MXSAMPD	02	WAVES 2 00X0	WET B	STN 149
LAT 48-180N	DAY 14	NO.DPTH	11	WND-DIR 270	WW-CODE	
LON 70-143W	HR 22.8	W-COLOR		WND-SPD 05	CLD-TPE	
MARSD SQ 152	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
233	0000	123 B	11990		0880	14704
233	0010	0773	21553	650 C	1681	14647
233	0020	0370	27784	670 C	2211	14562
233	0030	0310	28429	670 C	2267	14546
233	0050	0244 B	29191	660 C	2332	14531
233	0075	0252	29571		2362	14544
233	0100	0244	29745	650 C	2376	14547
233	0124	0252	29941	650 C	2392	14557
233	0149	0233	30111	640 C	2406	14555
233	0199	0089	30618	580 C	2456	14506
233	0238	0086	30710	570 C	2463	14512

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1230 B	11990		0880	14704	0000	00000	18629
0010	0773	21553		1681	14647	0146	00005	10820
0020	0370	27784		2211	14562	0229	00017	5724
0030	0310	28429		2267	14546	0284	00031	5189
0050	0244 B	29191		2332	14531	0382	00070	4564
0075	0252	29571		2362	14544	0493	00140	4280
0100	0244	29745		2376	14547	0598	00235	4142
0125	0252	29948		2392	14557	0701	00352	3994
0150	0230	30122		2408	14554	0799	00490	3846
0175	0157 D	3039 I		2434	14529	0893	00645	3595
0200	0126 H	3054 I		2447	14521	0981	00815	3461
0225	0098 D	3066 H		2459	14514	1067	01001	3351

C-REF-NO 001	YR 1964	DEPTH		WAVES 1 27X1	AIR T 13.3	VIS 8
CONS. NO 137	MONTH 8	MXSAMPD 02		WAVES 2 00X0	WET B	STN 150
LAT 48-213N	DAY 15	NO.DPTH 11		WND-DIR 270	WW-CODE	
LON 70-223W	HR 00.6	W-COLOR		WND-SPD 05	CLD-TPE	
MARSD SQ 152	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
011	0000	131 B	09030		0641	14699
011	0009	0610	24346	640 C	1918	14617
011	0019	0380	27596	680 C	2195	14564
011	0028	0265	28582	680 C	2282	14529
011	0047	0226	29128	670 C	2329	14522
011	0070	0220	29457		2355	14527
011	0094	0214	29726	650 C	2377	14532
011	0117	0207	29853	640 C	2388	14535
011	0141	0164	29976	640 C	2400	14521
011	0188	0089	30523	540 C	2448	14503
011	0235	0094	30726	570 C	2464	14515

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1310 B	09030		0641	14699	0000	00000	20992
0010	0572 C	2505 I		1977	14610	0144	00004	7971
0020	0364	2776 H		2210	14559	0213	00014	5735
0030	0254 B	2869 I		2292	14525	0266	00027	4948
0050	0224	2918 B		2333	14522	0362	00066	4557
0075	0219	29522		2360	14528	0473	00136	4295
0100	0214	2977 B		2380	14534	0578	00230	4106
0125	0195	2989 B		2391	14531	0680	00347	3999
0150	0146	3008 G		2409	14516	0778	00485	3824
0175	0105	3037 H		2435	14505	0871	00640	3579
0200	0093 B	3050 I		2446	14506	0960	00810	3475
0225	0091	3066 H		2459	14511	1046	00996	3346

C-REF-NO 001	YR 1964	DEPTH 252	WAVES 1 27X1	AIR T 13.3	VIS 8
CONS. NO 138	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B	STN 151
LAT 48-218N	DAY 15	NO.DPTH 11	WND-DIR 270	WW-CODE	
LON 70-329W	HR 02.6	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 152	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
031	0000	132 B	07570		0527	14685
031	0010	0547	25075	640 C	1981	14600
031	0019	0312	28176	690 C	2247	14542
031	0029	0189	28629	660 C	2291	14496
031	0048	0178 B	29130	670 C	2332	14501
031	0072	0184	29485		2360	14512
031	0096	0146	29638	650 C	2374	14501
031	0120	0114	29782	650 C	2387	14492
031	0144	0084	30022	600 C	2408	14486
031	0192	0100	30561	540 C	2451	14509
031	0230	0098	30715	550 C	2463	14516

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1320 B	07570		0527	14685	0000	00000	22119
0010	0547	25075		1981	14600	0149	00004	7928
0020	0295	2830 I		2257	14536	0215	00013	5280
0030	0185	28664		2294	14494	0267	00026	4929
0050	0179 B	29169		2335	14502	0362	00065	4539
0075	0180	29510		2362	14511	0472	00135	4280
0100	0140	29659		2376	14499	0578	00229	4142
0125	0107	29827		2391	14490	0680	00347	3994
0150	0084	3010 C		2414	14488	0778	00484	3775
0175	0090 B	3039 F		2437	14499	0870	00637	3556
0200	0085 C	3056 I		2451	14503	0958	00805	3425
0225	0095	3069 C		2461	14514	1043	00989	3325

C-REF-NO 001	YR 1964	DEPTH 92	WAVES 1 30X0	AIR T 13.3	VIS 8
CONS. NO 139	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B	S/N 152
LAT 48-246N	DAY 15	NO.DPTH 6	WND-DIR 300	WW-CODE	
LON 70-500W	HR 07.4	W-COLOR	WND-SPD 01	CLD-TPE	
MARSD SQ 152	C/I 1801	W-TRNSP	BAKO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
078	0000		02540			
078	0009	0927 B	15420		1186	14632
078	0019	0326	27210		2169	14535
078	0028	0175	28140		2253	14483
078	0047	0072	28966		2324	14450
078	0070	0062	29348		2355	14455

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000		02540						
0010	0864 D	1691 I		1309	14625	0199	00007	14432
0020	0298 B	2755 I		2198	14528	0300	00020	5850
0030	0155	2827 F		2265	14476	0356	00034	5210
0050	0027 G	2924 I		2348	14434	0452	00073	4409

C-REF-NO 001	YR 1964	DEPTH	74	WAVES 1 20X1	AIR T 13.3	VIS 8
CONS. NO 140	MONTH 8	MXSAMPD	01	WAVES 2 00X0	WET B	STN 153
LAT 48-475N	DAY 15	NO.DPTH	1	WND-DIR 200	WW-CODE	
LON 68-515W	HR 16.5	W-COLOR		WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
165	0073	0005 B	31898		2563	14464

C-REF-NO 001	YR 1964	DEPTH 119	WAVES 1 20X1	AIR T 13.9	VIS 8
CONS. NO 141	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B	STN 154
LAT 48-452N	DAY 15	NO.DPTH 1	WND-DIR 200	WW-CODE	
LON 68-495W	HR 17.1	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
171	0114	0022	32789		2633	14491

C-REF-NO 001	YR 1964	DEPTH 196	WAVES 1 19X1	AIR T 13.3	VIS 8
CONS. NO 142	MONTH 8	MXSAMPD 02	WAVES 2 19X0	WET B	STN 155
LAT 48-420N	DAY 15	NO.DPTH 1	WND-DIR 190	WW-CODE	
LON 68-469W	HR 17.8	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
178	0191	0356	34122		2715	14670

C-REF-NO 001	YR 1964	DEPTH 342	WAVES 1 19X1	AIR T 13.3	VIS 8
CONS. NO 143	MONTH 8	MXSAMPD 03	WAVES 2 19X1	WET B	STN 156
LAT 48-385N	DAY 15	NO.DPTH 1	WND-DIR 190	WW-CODE	
LON 68-444W	HR 18.7	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
187	0337	0446	34496		2736	14737

C-REF-NO 001	YR 1964	DEPTH 320	WAVES 1 21X1	AIR T 13.3	VIS 8
CONS. NO 144	MONTH 8	MXSAMPD 03	WAVES 2 21X1	WET B	STN 157
LAT 48-362N	DAY 15	NO.DPTH 1	WND-DIR 210	WW-CODE	
LON 68-408W	HR 19.3	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
193	0315	0444				

C-REF-NO 001	YR 1964	DEPTH 60	WAVES 1 21X1	AIR T 13.3	VIS 8
CONS. NO 145	MONTH 8	MXSAMPD 01	WAVES 2 21X2	WET B	STN 158
LAT 48-341N	DAY 15	NO.DPTH 1	WND-DIR 210	WW-CODE	
LON 68-388W	HR 20.2	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
202	0055	0226	31314		2503	14553

C-REF-NO 001	YR 1964	DEPTH 19	WAVES 1 23X1	AIR T	VIS 8
CONS. NO 146	MONTH 8	MXSAMPD 00	WAVES 2 23X1	WET B	STN 159
LAT 46-350N	DAY 18	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 64-310W	HR 19.1	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
191	0014	1618	29063		2118	15041

C-REF-NO 001	YR 1964	DEPTH 16	WAVES 1 23X1	AIR T	VIS 8
CONS. NO 147	MONTH 8	MXSAMPD 00	WAVES 2 23X1	WET B	STN 160
LAT 46-350N	DAY 18	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 64-350W	HR 19.7	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
197	0011	1598	29073		2123	15035

C-REF-NO 001	YR 1964	DEPTH 13	WAVES 1 21X0	AIR T 17.2	VIS 8
CONS. NO 148	MONTH 8	MXSAMPD 00	WAVES 2 21X0	WET B	STN 161
LAT 46-440N	DAY 18	NO.DPTH 1	WND-DIR 210	WW-CODE	
LON 64-455W	HR 22.7	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
227	0008	0868	29587		2296	14787

C-REF-NO 001	YR 1964	DEPTH	16	WAVES 1 19X0	AIR T 17.8	VIS 8
CONS. NO 149	MONTH 8	MXSAMPD	00	WAVES 2 19X0	WET B	STN 162
LAT 46-436N	DAY 19	NO.DPTH	1	WND-DIR 190	WW-CODE	
LON 64-433W	HR 01.3	W-COLOR		WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
013	0011	1038	29382		2254	14848

C-REF-NO 001	YR 1964	DEPTH 18	WAVES 1 19X0	AIR T 17.8	VIS 8
CONS. NO 150	MONTH 8	MXSAMPD 00	WAVES 2 19X0	WET B	STN 163
LAT 46-432N	DAY 19	NO.DPTH 1	WND-DIR 190	WW-CODE	
LON 64-415W	HR 02.0	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
020	0013	0966	29580		2281	14824

C-REF-NO 001	YR 1964	DEPTH 23	WAVES 1 19X0	AIR T 17.8	VIS 8
CONS. NO 151	MONTH 8	MXSAMPD 00	WAVES 2 19X0	WET B	STN 166
LAT 46-430N	DAY 19	NO.DPTH 1	WND-DIR 190	WW-CODE	
LON 64-360W	HR 04.6	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
046	0018	0743	29921		2339	14744

C-REF-NO 001	YR 1964	DEPTH 24	WAVES 1 22X1	AIR T 16.7	VIS 8
CONS. NO 152	MONTH 8	MXSAMPD 00	WAVES 2 22X1	WET B	STN 169
LAT 46-435N	DAY 19	NO.DPTH 1	WND-DIR 220	WW-CODE	
LON 64-280W	HR 06.1	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
061	0019	1554 C.	29046		2130	15022

C-REF-NO 001	YR 1964	DEPTH 17	WAVES 1 24X0	AIR T 16.7	VIS 8
CONS. NO 153	MONTH 8	MXSAMPD 00	WAVES 2 24X0	WET B	STN 170
LAT 46-430N	DAY 19	NO.DPTH 1	WND-DIR 240	WW-CODE	
LON 64-260W	HR 06.8	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
068	0012	1608	29143		2126	15039

C-REF-NO 001	YR 1964	DEPTH	22	WAVES 1 24X0	AIR T 16.7	VIS 8
CONS. NO 154	MONTH 8	MXSAMPD	00	WAVES 2 24X0	WET B	STN 171
LAT 46-485N	DAY 19	NO.DPTH	1	WND-DIR 240	WW-CODE	
LON 64-230W	HR 07.7	W-COLOR		WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
077	0017	1644	28799		2092	15047

C-REF-NO 001	YR 1964	DEPTH	27	WAVES 1 24X0	AIR T 16.7	VIS 8
CONS. NO 155	MONTH 8	MXSAMPD	00	WAVES 2 24X0	WET B	SIN 172
LAT 46-486N	DAY 19	NO.DPTH	1	WND-DIR 240	WW-CODE	
LON 64-295W	HR 08.6	W-COLOR		WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
086	0022	0490	30348		2403	14648

C-REF-NO 001	YR 1964	DEPTH 23	WAVES 1 24X1	AIR T 16.7	VIS 8
CONS. NO 156	MONTH 8	MXSAMPD 00	WAVES 2 24X1	WET B	STN 173
LAT 46-485N	DAY 19	NO.DPTH 1	WND-DIR 240	WW-CODE	
LON 64-368W	HR 09.3	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
093	0018	0663	29912		2349	14712

C-REF-NO 001	YR 1964	DEPTH	21	WAVES 1 26X1	AIR T 16.7	VIS 8
CONS. NO 157	MONTH 8	MXSAMPD	00	WAVES 2 26X1	WET B	STN 174
LAT 46-486N	DAY 19	NO.DPTH	1	WND-DIR 260	WW-CODE	
LON 64-440W	HR 09.9	W-COLOR		WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
099	0016	0696	30018		2353	14726

C-REF-NO 001	YR 1964	DEPTH	9	WAVES 1 26X0	AIR T 17.2	VIS 8
CONS. NO 158	MONTH 8	MXSAMPD	00	WAVES 2 26X1	WET B	STN 175
LAT 46-485N	DAY 19	NO.DPTH	1	WND-DIR 260	WW-CODE	
LON 64-500W	HR 10.8	W-COLOR		WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
108	0004	1470	29069		2150	14992

C-REF-NO 001	YR 1964	DEPTH	12	WAVES 1 20X0	AIR T 16.7	VIS 8
CONS. NO 159	MONTH 8	MXSAMPD	00	WAVES 2 20X0	WET B	STN 176
LAT 46-530N	DAY 19	NO.DPTH	1	WND-DIR 200	WW-CODE	
LON 64-494W	HR 12.2	W-COLOR		WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
122	0008	1539 C	29032		2133	15015

C-REF-NO 001	YR 1964	DEPTH 14	WAVES 1 49X0	AIR T 16.7	VIS 5
CONS. NO 160	MONTH 8	MXSAMPD 00	WAVES 2 49X0	WET B	STN 177
LAT 46-517N	DAY 19	NO.DPTH 1	WND-DIR 990	WW-CODE	
LON 64-460W	HR 13.8	W-COLOR	WND-SPD 01	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
138	0011	1574	29012		2124	15026

C-REF-NO 001	YR 1964	DEPTH	16	WAVES 1 49X0	AIR T 17.2	VIS 5
CONS. NO 161	MONTH 8	MXSAMPD	00	WAVES 2 49X0	WET B	STN 178
LAT 46-536N	DAY 19	NO.DPTH	1	WND-DIR 990	WW-CODE	
LON 64-440W	HR 14.2	W-COLOR		WND-SPD 01	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
142	0011	1583	28983		2119	15029

C-REF-NO 001	YR 1964	DEPTH 27	WAVES 1 49X0	AIR T 17.2	VIS 6
CONS. NO 162	MONTH 8	MXSAMPD 00	WAVES 2 49X0	WET B	STN 179
LAT 46-536N	DAY 19	NO.DPTH 1	WND-DIR 990	HW-CODE	
LON 64-374W	HR 15.0	W-COLOR	WND-SPD 01	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP.	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
150	0022	0542	30188		2385	14667

C-REF-NO 001	YR 1964	DEPTH 33	WAVES 1 18X0	AIR T 17.2	VIS 3
CONS. NO 163	MONTH 8	MXSAMPD 00	WAVES 2 18X0	WET B	STN 180
LAT 46-535N	DAY 19	NO.DPTH 1	WND-DIR 180	WW-CODE	
LON 64-302W	HR 16.7	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
167	0028	0650	30335		2384	14714

C-REF-NO 001	YR 1964	DEPTH 28	WAVES 1 18X0	AIR T 17.2	VIS 4
CONS. NO 164	MONTH 8	MXSAMPD 00	WAVES 2 18X1	WET B	STN 181
LAT 46-530N	DAY 19	NO.DPTH 1	WND-DIR 180	WW-CODE	
LON 64-229W	HR 17.8	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
178	0023	0639 C	30026		2361	14705

C-REF-NO 001	YR 1964	DEPTH 16	WAVES 1 30X1	AIR T 16.7	VIS 4
CONS. NO 165	MONTH 8	MXSAMPD 00	WAVES 2 30X1	WET B	STN 182
LAT 46-535N	DAY 19	NO.DPTH 1	WND-DIR 300	WW-CODE	
LON 64-156W	HR 18.8	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
188	0011	1656	28804		2090	15050

C-REF-NO 001	YR 1964	DEPTH 36	WAVES 1 30X0	AIR T 16.7	VIS 4
CONS. NO 166	MONTH 8	MXSAMPD 00	WAVES 2 30X1	WET B	STN 183
LAT 47-000N	DAY 19	NO.DPTH 1	WND-DIR 300	WW-CODE	
LON 64-090W	HR 20.2	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
202	0031	1560	28751		2107	15022

C-REF-NO 001	YR 1964	DEPTH 35	WAVES 1 32X0	AIR T 16.7	VIS 4
CONS. NO 167	MONTH 8	MXSAMPD 00	WAVES 2 32X1	WET B	STN 184
LAT 46-595N	DAY 19	NO.DPTH 1	WND-DIR 320	WW-CODE	
LON 64-178W	HR 21.0	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1003.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
210	0030	0552	30524		2410	14677

C-REF-NO 001	YR 1964	DEPTH 32	WAVES 1 32X3	AIR T 16.1	VIS 4
CONS. NO 168	MONTH 8	MXSAMPD 00	WAVES 2 32X1	WET B	STN 185
LAT 46-596N	DAY 19	NO.DPTH 1	WND-DIR 320	WW-CODE	
LON 64-320W	HR 22.1	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1002.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
221	0027	0834 B	29598		2302	14777

C-REF-NO 001	YR 1964	DEPTH 8	WAVES 1 28X3	AIR T 16.1	VIS 4
CONS. NO 169	MONTH 8	MXSAMPD 00	WAVES 2 28X2	WET B	SYN 186
LAT 46-595N	DAY 19	NO.DPTH 1	WND-DIR 280	WW-CODE	
LON 64-442W	HR 23.4	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1002.5	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
234	0008	1334	29117		2181	14949

C-REF-NO 001	YR 1964	DEPTH	10	WAVES 1 25X1	AIR T 14.4	VIS 8
CONS. NO 170	MONTH 8	MXSAMPD	00	WAVES 2 25X1	WET B	STN 187
LAT 46-596N	DAY 20	NO.DPTH	1	WND-DIR 250	WW-CODE	
LON 64-460W	HR 00.0	W-COLOR		WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1003.3	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
000	0005	1324	29167		2186	14945

C-REF-NO 001	YR 1964	DEPTH 16	WAVES 1 27X1	AIR T 13.3	VIS 8
CONS. NO 171	MONTH 8	MXSAMPD 00	WAVES 2 27X1	WET B	STN 188
LAT 47-120N	DAY 20	NO.DPTH 1	WND-DIR 270	WW-CODE	
LON 64-568W	HR 01.8	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
018	0011	1422	28465		2113	14971

C-REF-NO 001	YR 1964	DEPTH 32	WAVES 1 27X1	AIR T 12.8	VIS 8
CONS. NO 172	MONTH 8	MXSAMPD 00	WAVES 2 27X1	WET B	STN 189
LAT 47-121N	DAY 20	NO.DPTH 1	WND-DIR 270	WW-CODE	
LON 64-390W	HR 03.0	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
030	0027	0569	30490		2405	14683

C-REF-NO 001	YR 1964	DEPTH 46	WAVES 1 27X2	AIR T 13.3	VIS 8
CONS. NO 173	MONTH 8	MXSAMPD 00	WAVES 2 27X2	WET B	STN 190
LAT 47-118N	DAY 20	NO. OPTH 1	WND-DIR 270	WW-CODE	
LON 64-179W	HR 04.4	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
044	0041	0326	31062		2475	14591

C-REF-NO 001	YR 1964	DEPTH 33	WAVES 1 28X2	AIR T 15.0	VIS 8
CONS. NO 174	MONTH 8	MXSAMPD 00	WAVES 2 28X2	WET B	STN 191
LAT 47-120N	DAY 20	NO.DPTH 1	WND-DIR 280	WW-CODE	
LON 64-029W	HR 05.4	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
054	0028	0454 B	30652		2431	14638

C-REF-NO 001	YR 1964	DEPTH	38	WAVES 1 27X2	AIR T 15.0	VIS 8
CONS. NO 175	MONTH 8	MXSAMPD	00	WAVES 2 27X2	WET B	SIN 192
LAT 47-199N	DAY 20	NO.DPTH	1	WND-DIR 270	WW-CODE	
LON 64-029W	HR 06.5	W-COLOR		WND-SPD 09	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1004.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
065	0033	0427	30937		2456	14631

C-REF-NO 001	YR 1964	DEPTH	51	WAVES 1 27X2	AIR T 15.0	VIS 8
CONS. NO 176	MONTH 8	MXSAMPD	00	WAVES 2 27X2	WET B	STN 193
LAT 47-195N	DAY 20	NO.DPTH	1	WND-DIR 270	WW-CODE	
LON 64-165W	HR 07.5	W-COLOR		WND-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
075	0046	0230	31319		2503	14553

C-REF-NO 001	YR 1964	DEPTH 32	WAVES 1 27X2	AIR T 15.6	VIS 8
CONS. NO 177	MONTH 8	MXSAMPD 00	WAVES 2 27X2	WET B	STN 194
LAT 47-198N	DAY 20	NO.DPTH 1	WNO-DIR 270	WW-CODE	
LON 64-372W	HR 09.2	W-COLOR	WNO-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
092	0027	0612	30324		2387	14698

C-REF-NO 001	YR 1964	DEPTH 18	WAVES 1 27X2	AIR T 15.6	VIS 8
CONS. NO 178	MONTH 8	MXSAMPD 00	WAVES 2 27X2	WET B	STN 195
LAT 47-192N	DAY 20	NO.DPTH 1	WND-DIR 270	WW-CODE	
LON 64-498W	HR 10.1	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
101	0013	1518 B	28786		2118	15006

C-REF-NO 001	YR 1964	DEPTH 12	WAVES 1 27X2	AIR T 13.3	VIS 8
CONS. NO 179	MONTH 8	MXSAMPD 00	WAVES 2 27X2	WET B	STN 196
LAT 47-310N	DAY 20	NO.DPTH 1	WNO-DIR 270	WW-CODE	
LON 64-509W	HR 11.6	W-COLOR	WNO-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
116	0007	1227	29164		2204	14912

C-REF-NO 001	YR 1964	DEPTH 17	WAVES 1 27X2	AIR T 15.6	VIS 8
CONS. NO 180	MONTH 8	MXSAMPD 00	WAVES 2 27X2	WET B	STN 197
LAT 47-310N	DAY 20	NO.DPTH 1	WND-DIR 270	WW-CODE	
LON 64-473W	HR 12.0	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
120	0012	1489	28749		2121	14996

C-REF-NO 001	YR 1964	DEPTH 25	WAVES 1 27X2	AIR T 15.6	VIS 8
CONS. NO 181	MONTH 8	MXSAMPD 00	WAVES 2 27X2	WET B	STN 198
LAT 47-300N	DAY 20	NO.DPTH 1	WND-DIR 270	WW-CODE	
LON 64-330W	HR 13.1	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
131	0020	1447 B	28803		2134	14984

C-REF-NO 001	YR 1964	DEPTH 48	WAVES 1 26X1	AIR T 16.7	VIS 8
CONS. NO 182	MONTH 8	MXSAMPD 00	WAVES 2 26X2	WET B	STN 199
LAT 47-310N	DAY 20	NO.DPTH 1	WND-DIR 260	WW-CODE	
LON 64-209W	HR 14.1	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
141	0043	0168	31572		2527	14529

C-REF-NO 001	YR 1964	DEPTH 64	WAVES 1 26X1	AIR T 16.7	VIS 8
CONS. NO 183	MONTH 8	MXSAMPD 01	WAVES 2 26X2	WET B	STN 200
LAT 47-312N	DAY 20	NO.DPTH 1	WND-DIR 260	WW-CODE	
LON 64-104W	HR 14.9	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0059	-0004	32229		2590	14462

C-REF-NO 001	YR 1964	DEPTH	81	WAVES 1 26X2	AIR T 17.2	VIS 8
CONS. NO 184	MONTH 8	MXSAMPD	01	WAVES 2 26X3	WET B	STN 201
LAT 47-440N	DAY 20	NO.DPTH	1	WND-DIR 260	WW-CODE	
LON 64-010W	HR 16.2	W-COLOR		WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
162	0076	0004	32378		2601	14471

C-REF-NO 001	YR 1964	DEPTH	54	WAVES 1 27X2	AIR T 17.8	VIS 8
CONS. NO 185	MONTH 8	MXSAMPD	00	WAVES 2 27X3	WET B	STN 202
LAT 47-437N	DAY 20	NO.DPTH	1	WND-DIR 270	WW-CODE	
LON 64-119W	HR 17.4	W-COLOR		WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
174	0049	0107	31827		2552	14506

C-REF-NO 001	YR 1964	DEPTH 40	WAVES 1 29X2	AIR T 18.3	VIS 8
CONS. NO 186	MONTH 8	MXSAMPD 00	WAVES 2 29X2	WET B	STN 203
LAT 47-439N	DAY 20	NO.DPTH 1	WND-DIR 290	WW-CODE	
LON 64-199W	HR 18.2	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
182	0035	0329	31114		2479	14592

C-REF-NO 001	YR 1964	DEPTH 34	WAVES 1 29X1	AIR T 18.9	VIS 8
CONS. NO 187	MONTH 8	MXSAMPD 00	WAVES 2 29X1	WET B	STN 204
LAT 47-440N	DAY 20	NO.DPTH 1	WND-DIR 290	WW-CODE	
LON 64-260W	HR 18.9	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
189	0029	0774	29902		2334	14758

C-REF-NO 001	YR 1964	DEPTH 29	WAVES 1 29X1	AIR T 18.9	VIS 8
CONS. NO 188	MONTH 8	MXSAMPD 00	WAVES 2 29X1	WET B	STN 205
LAT 47-445N	DAY 20	NO.DPTH 1	WNC-DIR 290	WV-CODE	
LON 64-330W	HR 19.4	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
194	0024	0936	29689		2294	14816

C-REF-NO 001	YR 1964	DEPTH	51	WAVES 1 27X2	AIR T 18.3	VIS 8
CONS. NO 189	MONTH 8	MXSAMPD	00	WAVES 2 27X2	WET B	STN 206
LAT 48-000N	DAY 20	NO.DPTH	1	WND-DIR 270	WW-CODE	
LON 64-040W	HR 21.7	W-COLOR		WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
217	0046	0348 B	30357		2417	14591

C-REF-NO 001	YR 1964	DEPTH 28	WAVES 1 27X2	AIR T 18.3	VIS 8
CONS. NO 190	MONTH 8	MXSAMPD 00	WAVES 2 27X2	WET B	STN 207
LAT 48-000N	DAY 20	NO.DPTH 1	WND-DIR 270	WW-CODE	
LON 64-160W	HR 22.6	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
226	0023	1244	28814		2174	14916

C-REF-NO 001	YR 1964	DEPTH 12	WAVES 1 26X2	AIR T 18.3	VIS 8
CONS. NO 191	MONTH 8	MXSAMPD 00	WAVES 2 27X2	WET B	STN 208
LAT 48-000N	DAY 20	NO.DPTH 1	WND-DIR 270	WW-CODE	
LON 64-224W	HR 23.6	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
236	0007	1382	28329		2111	14955

C-REF-NO 001	YR 1964	DEPTH 82	WAVES 1 24X2	AIR T 18.3	VIS 8
CONS. NO 192	MONTH 8	MXSAMPD 01	WAVES 2 24X2	WET B	STN 210
LAT 48-080N	DAY 21	NO.DPTH 1	WND-DIR 240	WW-CODE	
LON 64-410W	HR 01.3	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
013	0077	0010	32375		2601	14474

C-REF-NO 001	YR 1964	DEPTH 98	WAVES 1 26X1	AIR T 14.4	VIS 8
CONS. NO 193	MONTH 8	MXSAMPD 01	WAVES 2 26X1	WET B	SFN 211
LAT 48-100N	DAY 21	NO.DPTH 1	WND-DIR 260	WW-CODE	
LON 64-450W	HR 01.9	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
019	0093	0020	32578		2617	14484

C-REF-NO 001	YR 1964	DEPTH 32	WAVES 1 26X1	AIR T 14.4	VIS 8
CONS. NO 194	MONTH 8	MXSAMPD 00	WAVES 2 26X1	WET B	STN 212
LAT 48-117N	DAY 21	NO.DPTH 1	WND-DIR 260	WW-CODE	
LON 64-470W	HR 02.5	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
025	0027	0263 B	30993		2475	14560

C-REF-NO 001	YR 1964	DEPTH 84	WAVES 1 26X1	AIR T 14.4	VIS 8
CONS. NO 195	MONTH 8	MXSAMPD 01	WAVES 2 26X1	WET B	STN 213
LAT 48-132N	DAY 21	NO.DPTH 1	WND-DIR 260	WW-CODE	
LON 64-431W	HR 02.9	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
029	0079	0014	32429		2605	14477

C-REF-NO 001	YR 1964	DEPTH 94	WAVES 1 25X1	AIR T 15.0	VIS 8
CONS. NO 196	MONTH 8	MXSAMPD 01	WAVES 2 25X1	WET B	STN 214
LAT 48-130N	DAY 21	NO.DPTH 1	WNC-DIR 250	WW-CODE	
LON 64-330W	HR 03.7	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
037	0089	0030	32648		2622	14489

C-REF-NO 001	YR 1964	DEPTH	91	WAVES 1 26X1	AIR T 14.4	VIS 8
CONS. NO 197	MONTH 8	MXSAMPD	01	WAVES 2 26X1	WET B	STN 215
LAT 48-130N	DAY 21	NO.DPTH	1	WND-DIR 260	WW-CODE	
LON 64-210W	HR 04.6	W-COLOR		WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
046	0086	0032	32696		2626	14490

C-REF-NO 001	YR 1964	DEPTH 74	WAVES 1 24X1	AIR T 14.4	VIS 8
CONS. NO 198	MONTH 8	MXSAMPD 01	WAVES 2 24X1	WET B	STN 216
LAT 48-132N	DAY 21	NO.DPTH 1	WND-DIR 240	WW-CODE	
LON 64-180W	HR 05.0	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
050	0069	0019	32341		2598	14476

C-REF-NO 001	YR 1964	DEPTH 115	WAVES 1 25X1	AIR T 13.9	VIS 8
CONS. NO 199	MONTH 8	MXSAMPD 01	WAVES 2 25X1	WET B	STN 217
LAT 48-182N	DAY 21	NO.DPTH 1	WND-DIR 250	WW-CODE	
LON 64-235W	HR 06.0	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
060	0110	0026 B	32677		2624	14491

C-REF-NO 001	YR 1964	DEPTH 84	WAVES 1 23X1	AIR T 13.9	VIS 8
CONS. NO 200	MONTH 8	MXSAMPD 01	WAVES 2 23X1	WET B	STN 218
LAT 48-212N	DAY 21	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 64-267W	HR 06.7	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
067	0079	0034 B	32251		2590	14483

C-REF-NO 001	YR 1964	DEPTH 106	WAVES 1 23X1	AIR T 13.9	VIS 8
CONS. NO 201	MONTH 8	MXSAMPD 01	WAVES 2 23X1	WET B	STN 219
LAT 48-200N	DAY 21	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 64-290W	HR 07.2	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
072	0101	0016	32475		2609	14482

C-REF-NO 001	YR 1964	DEPTH 106	WAVES 1 23X1	AIR T 13.9	VIS 8
CONS. NO 202	MONTH 8	MXSAMPD 01	WAVES 2 23X1	WET B	STN 220
LAT 48-180N	DAY 21	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 64-310W	HR 07.8	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
078	0101	0024	32603		2618	14487

C-REF-NO 001	YR 1964	DEPTH 100	WAVES 1 23X2	AIR T 13.9	VIS 8
CONS. NO 203	MONTH 8	MXSAMPD 01	WAVES 2 23X1	WET B	STN 221
LAT 48-168N	DAY 21	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 64-340W	HR 08.5	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
085	0095	0017	32509		2611	14482

C-REF-NO 001	YR 1964	DEPTH	92	WAVES 1 23X2	AIR T 13.9	VIS 8
CONS. NO 204	MONTH 8	MXSAMPD	01	WAVES 2 23X1	WET B	STN 222
LAT 48-170N	DAY 21	NO.DPTH	1	WND-DIR 230	WW-CODE	
LON 64-379W	HR 09.1	W-COLOR		WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
091	0087	0015	32315		2596	14477

C-REF-NO 001	YR 1964	DEPTH 37	WAVES 1 23X1	AIR T 14.4	VIS 8
CONS. NO 205	MONTH 8	MXSAMPD 00	WAVES 2 23X1	WET B	STN 223
LAT 48-190N	DAY 21	NO.DPTH 1	WND-DIR 230	WW-CODE	
LON 64-390W	HR 09.7	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
097	0032	0680	30225		2371	14725

C-REF-NO 001	YR 1964	DEPTH	52	WAVES 1 24X1	AIR T 13.9	VIS 5
CONS. NO 206	MONTH 8	MXSAMPD	00	WAVES 2 24X1	WET B	STN 224
LAT 48-240N	DAY 21	NO.DPTH	1	WND-DIR 240	WW-CODE	
LON 64-210W	HR 16.8	W-COLOR		WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
168	0047	0484	30732		2434	14654

C-REF-NO 001	YR 1964	DEPTH	72	WAVES 1 27X1	AIR T 14.4	VIS 8
CONS. NO 207	MONTH 8	MXSAMPD	01	WAVES 2 27X2	WET B	STN 225
LAT 48-228N	DAY 21	NO.DPTH	1	WND-DIR 270	WW-CODE	
LON 64-074W	HR 17.9	W-COLOR		WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
179	0067	0064	32183		2583	14494

C-REF-NO 001	YR 1964	DEPTH	88	WAVES 1 33X1	AIR T 15.0	VIS 8
CONS. NO 208	MONTH 8	MXSAMPD	01	WAVES 2 33X2	WET B	STN 226
LAT 48-225N	DAY 21	NO.DPTH	1	WND-DIR 330	WW-CODE	
LON 63-595W	HR 18.7	W-COLOR		WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
187	0083	0015	32462		2608	14478

C-REF-NO 001	YR 1964	DEPTH 120	WAVES 1 33X2	AIR T 15.0	VIS 8
CONS. NO 209	MONTH 8	MXSAMPD 01	WAVES 2 33X2	WET B	STN 227
LAT 48-220N	DAY 21	NO.DPTH 1	WND-DIR 330	WW-CODE	
LON 63-481W	HR 19.6	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
196	0104	0083	33024		2649	14520

C-REF-NO 001	YR 1964	DEPTH 108	WAVES 1 33X2	AIR T 15.0	VIS 8
CONS. NO 210	MONTH 8	MXSAMPD 01	WAVES 2 33X2	WET B	STN 228
LAT 48-220N	DAY 21	NO.DPTH 1	WND-DIR 330	WW-CODE	
LON 63-430W	HR 20.4	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
204	0097	0062	32939		2643	14509

C-REF-NO 001	YR 1964	DEPTH	90	WAVES 1 33X3	AIR T 15.0	VIS 8
CONS. NO 211	MONTH 8	MXSAMPD	01	WAVES 2 33X3	WET 8	STN 229
LAT 48-218N	DAY 21	NO.DPTH	1	WND-DIR 330	WW-CODE	
LON 63-400W	HR 21.0	W-COLOR		WND-SPD 09	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
210	0085	0044	32894		2641	14498

C-REF-NO 001	YR 1964	DEPTH	97	WAVES 1 32X3	AIR T 15.0	VIS 8
CONS. NO 212	MONTH 8	MXSAMPD	01	WAVES 2 32X3	WET B	STN 230
LAT 48-225N	DAY 21	NO.DPTH	1	WND-DIR 320	WW-CODE	
LON 63-360W	HR 21.6	W-COLOR		WND-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
216	0092	0038 E	32933		2644	14497

C-REF-NO 001	YR 1964	DEPTH 108	WAVES 1 32X3	AIR T 15.0	VIS 8
CONS. NO 213	MONTH 8	MXSAMPD 01	WAVES 2 32X3	WET B	STN 231
LAT 48-220N	DAY 21	NO.DPTH 1	WND-DIR 320	WW-CODE	
LON 63-318W	HR 22.1	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1006.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
221	0103	0063	33036		2651	14511

C-REF-NO 001	YR 1964	DEPTH 100	WAVES 1 32X4	AIR T 15.0	VIS 8
CONS. NO 214	MONTH 8	MXSAMPD 01	WAVES 2 32X4	WET B	STN 232
LAT 48-220N	DAY 21	NO.DPTH 1	WND-DIR 320	WW-CODE	
LON 63-290W	HR 22.6	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1007.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
226	0086	0064	33031		2651	14509

C-REF-NO 001	YR 1964	DEPTH 83	WAVES 1 35X4	AIR T 13.3	VIS 8
CONS. NO 215	MONTH 8	MXSAMPD 01	WAVES 2 35X4	WET B	STN 233
LAT 48-224N	DAY 21	NO.DPTH 1	WNO-DIR 350	WW-CODE	
LON 63-200W	HR 23.4	W-COLOR	WNO-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
234	0071	0078 C	33019		2649	14513

C-REF-NO 001	YR 1964	DEPTH	77	WAVES 1 33X2	AIR T 13.9	VIS 8
CONS. NO 216	MONTH 8	MXSAMPD	01	WAVES 2 33X3	WET B	STN 234
LAT 48-098N	DAY 22	NO.DPTH	1	WND-DIR 330	WW-CODE	
LON 63-030W	HR 00.8	W-COLOR		WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1010.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
008	0072	-0015	32183		2586	14459

C-REF-NO 001	YR 1964	DEPTH	72	WAVES 1 33X2	AIR T 13.3	VIS 8
CONS. NO 217	MONTH 8	MXSAMPD	01	WAVES 2 33X3	WET B	STN 235
LAT 47-590N	DAY 22	NO.DPTH	1	WND-DIR 330	WW-CODE	
LON 62-550W	HR 02.4	W-COLOR		WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1010.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
024	0067	-0014	32178		2586	14458

C-REF-NO 001	YR 1964	DEPTH	81	WAVES 1 33X2	AIR T 13.3	VIS 8
CONS. NO 218	MONTH 8	MXSAMPD	01	WAVES 2 33X3	WET B	STN 236
LAT 47-548N	DAY 22	NO.DPTH	1	WND-DIR 330	WW-CODE	
LON 62-490W	HR 03.5	W-COLOR		WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1010.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
035	0076	-0114	32457		2612	14417

C-REF-NO 001	YR 1964	DEPTH	56	WAVES 1 35X2	AIR T 14.4	VIS 8
CONS. NO 219	MONTH 8	MXSAMPD	01	WAVES 2 35X3	WET B	STN 237
LAT 47-344N	DAY 22	NO.DPTH	1	WNO-DIR 350	WW-CODE	
LON 62-572W	HR 05.5	W-COLOR		WNO-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1011.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
055	0051	0032	31613		2538	14469

C-REF-NO 001	YR 1964	DEPTH	58	WAVES 1 32X2	AIR T 16.1	VIS 8
CONS. NO 220	MONTH 8	MXSAMPD	01	WAVES 2 32X3	WET B	STN 238
LAT 47-200N	DAY 22	NO.DPTH	1	WND-DIR 320	WW-CODE	
LON 62-580W	HR 07.0	W-COLOR		WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1012.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
070	0053	0006	31681		2545	14458

C-REF-NO 001	YR 1964	DEPTH	57	WAVES 1 32X2	AIR T 16.1	VIS 8
CONS. NO 221	MONTH 8	MXSAMPD	01	WAVES 2 32X2	WET B	STN 239
LAT 47-065N	DAY 22	NO.DPTH	1	WND-DIR 320	WW-CODE	
LON 62-570W	HR 08.8	W-COLOR		WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP		BARO 1014.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
088	0052	-0026	31548		2536	14442

C-REF-NO 001	YR 1964	DEPTH 62	WAVES 1 32X2	AIR T 16.1	VIS 8
CONS. NO 222	MONTH 8	MXSAMPD 01	WAVES 2 32X1	WET B	STN 240
LAT 46-566N	DAY 22	NO.DPTH 1	WND-DIR 320	WW-CODE	
LON 62-380W	HR 10.6	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1015.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
106	0057	-0013	31602		2540	14449

C-REF-NO 001	YR 1964	DEPTH 69	WAVES 1 34X2	AIR T 15.0	VIS 8
CONS. NO 223	MONTH 8	MXSAMPD 01	WAVES 2 34X2	WET B	STN 241
LAT 46-530N	DAY 22	NO.DPTH 1	WND-DIR 340	WW-CODE	
LON 62-190W	HR 12.2	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.0	CLD-AMT	HW

O B S E R V E D

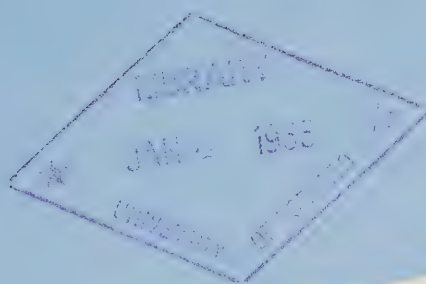
GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
122	0059	-0004	31635		2542	14454

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CANADA



DATA RECORD

NORTH ATLANTIC
East of Nova Scotia, South of
the Grand Banks

March 5 to August 10, 1962

No. 10

1965 Data Record Series

Canadian Oceanographic Data Centre

Programmed by the
Canadian Committee on Oceanography

1965

ROGER DUHAMEL, F. R. S. C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
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**NORTH ATLANTIC
East of Nova Scotia,
South of the Grand Banks
March 5 to August 10, 1962**

**CODC Reference: 356
361**

No. 10

1965 Data Record Series

**Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada**

Programmed by the Canadian Committee on Oceanography

PART I

CODC Reference 356

CNAV "Sackville"

DEPARTMENT OF MINES AND TECHNICAL SURVEYS

and

FISHERIES RESEARCH BOARD OF CANADA

Part I

Scotian Shelf to Gulf Stream

Ship:	CNAV "Sackville"
Local cruise designation:	S-61
Cruise period:	March 5 - March 21, 1962
Observers:	C. R. Mann
	T. R. Foote
	G. B. Taylor
	G. N. Ewing
	K. B. Abbott-Smith

MARINE SCIENCES BRANCH

and

ATLANTIC OCEANOGRAPHIC GROUP

Bedford Institute of Oceanography, Dartmouth, N. S.

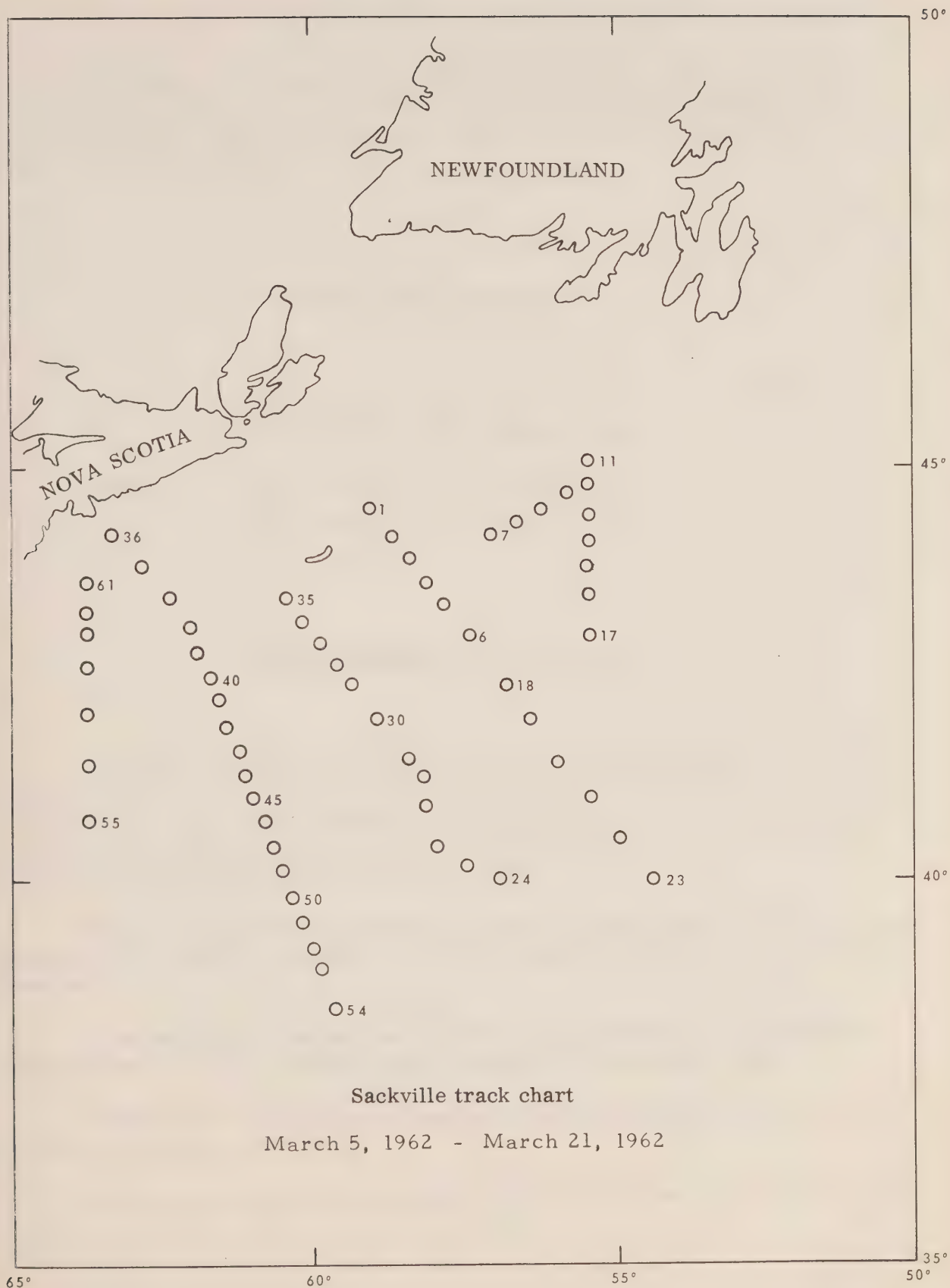
SECTION I

Description of data collection procedures

"SACKVILLE"



Fisheries Research Board



INTRODUCTION

The object of this cruise was to collect oceanographic data for studies of ocean circulation in the area east of Nova Scotia and south of Newfoundland as far as the Gulf Stream. Simultaneous measurements were made by CSS Baffin in an area southeast of the Grand Banks.

EXTRACT OF CRUISE LOG

Phase 1:	Depart Halifax, N.S. 5 March, 1962
	Return Halifax, N.S. 14 March, 1962
Phase 2:	Depart Halifax, N.S. 16 March, 1962
	Return Halifax, N.S. 21 March, 1962.

OBSERVATIONAL PROCEDURES

A total of 61 Oceanographic Stations was occupied employing Knudsen water bottles and Richter and Wiese reversing thermometers. Observations were intended to be made at or near standard depths to the bottom but due to the large wire angles and drift, it was seldom possible to get much below 2000 metres. Two casts were made on most stations the first being the deep one.

Surface temperatures were taken in a metal bucket at each station and a towed thermistor was operated throughout the cruise except for one brief shut-down due to a power failure.

Dissolved oxygen content was determined at all stations for observations below 100 metres using a modified Winkler technique (FRB Bulletin 125).

Salinities were determined at the Bedford Institute of Oceanography with the NIO conductive salinometer No. 3.

Weather observations were made at each station by the ship's officers.

BATHYTHERMOGRAPH DATA

BT observations to a maximum depth of 275 metres were made at each station prior to the bottle cast.

BT records were processed at the Bedford Institute of Oceanography.

PERSONNELAt Sea:

C. R. Mann	Scientist-in-Charge
T. R. Foote	
G. N. Ewing	
G. B. Taylor	
K. B. Abbott-Smith	
M. W. Blenkhorn	
A. Stuart	
C. J. Pellerin	

Data Analyses:

Compilation of Data:	T. R. Foote
	G. B. Taylor
Salinity determinations:	T. R. Foote
BT Processing:	T. A. Grant
	D. M. MacDonald

SECTION II

Description of the machine-generated data record

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an **"estimate of precision"** for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation (σ)** can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under **"GENERAL INFORMATION"** in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an **"interpolation error estimate"** derived from the particular interpolation formula used. There are two purposes in stating the error estimates; **first**, to give an indication of the quality of the interpolated data; **second**, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T, S, O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the **"measurement error estimate"** comprises the **"combined measurement and interpolation error estimate"**. It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

1 IDENT. CODE		2 LATITUDE (N=+)		3 LONGITUDE (W=+)		5 DATE		6 TIME		7 DEPTH		9 NO. DEPTHS OBS'D.		VESSEL															
COUNTRY INST.		DEG. MIN. 1/10		DEG. MIN. 1/10		YEAR MONTH DAY		HOURS 1/10 G.M.T.		TO BOTTOM				ENTERED BY		CHECKED BY													
1 8												34 35																	
10 WATER		11 WAVES I		12 WAVES II		13 WIND		14 BAROMETER		15 AIR TEMP.		16 WET BULB		17 W.W. CODE		18 CLOUD TYPE		19 HOURS AFTER H.W.		20 UNASSIGNED		21 CRUISE REFERENCE NUMBER		22 CONSEC. NUMBER		23		24	
COLOUR TRANS.		Dw Dw Pw Hw		Dw Dw Pw Hw		DIR. DIR.				1/10		1/10		(SEPT. 62)														1	

36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		6 TIME HOURS 1/10 G.M.T.		7 DEPTH OF SAMPLE		8 TEMPERATURE		9 SALINITY		10 OXYGEN		13 PO ₄ - P		14 TOTAL - P		15 NO ₂ - N		16 NO ₃ - N		17 SiO ₂ - Si		18 p.H.		3	
1				e		e		d/‰		e		↓		↓		↓		↓		↓		↓			
2																						3			
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21																						3			
22																						3			
23																						3			
24																						3			

* COLUMNS 1-24 AS ON MASTER *

OBSERVED CARD

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ = Standard deviation of the combined error estimates at standard oceanographic depth,

ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $^{1/3} (V_{i_1} - V_{i_2})$

γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) WW-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

- (1) CRUISE REFERENCE NUMBER: Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.
- (2) CONSECUTIVE NUMBER: Indicates the chronological order in which the stations were occupied.
- (3) LATITUDE: Indicate the position of the platform at the time of observation.
- (4) LONGITUDE:
- (5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).
- (6) YEAR:
- (7) MONTH:
- (8) DAY:
- (9) HOUR: The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.
- (10) COUNTRY/INSTITUTE: The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.
- (11) DEPTH: The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".
- (12) MAXIMUM SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).
00 m - 50 m = 00
51 m - 150 m = 01
151 m - 250 m = 02
etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: The Forel-Ule Code (see table 2 and NOTE under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;
- NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.
- (16) WAVES 1
($d_W d_W P_W H_W$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_W d_W P_W H_W$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE
(WND-FCE): Beaufort notation (See Table 6).
- WIND SPEED
(WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO_4	(9) -P-	(10) NO_2	(11) NO_3	(12) SiO_2
				(13) pH.	

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 C1\%$, reported in:
 a. 1/100 parts per 1000, or
 b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places. An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

(8) PO ₄	Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
(9) -P-	Total Phosphorus reported to hundredths of microgram-atoms per litre.
(10) NO ₂	Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
(11) NO ₃	Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
(12) SiO ₂	Silicate-Silicon reported in whole microgram-atoms per litre.
(13) pH	The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

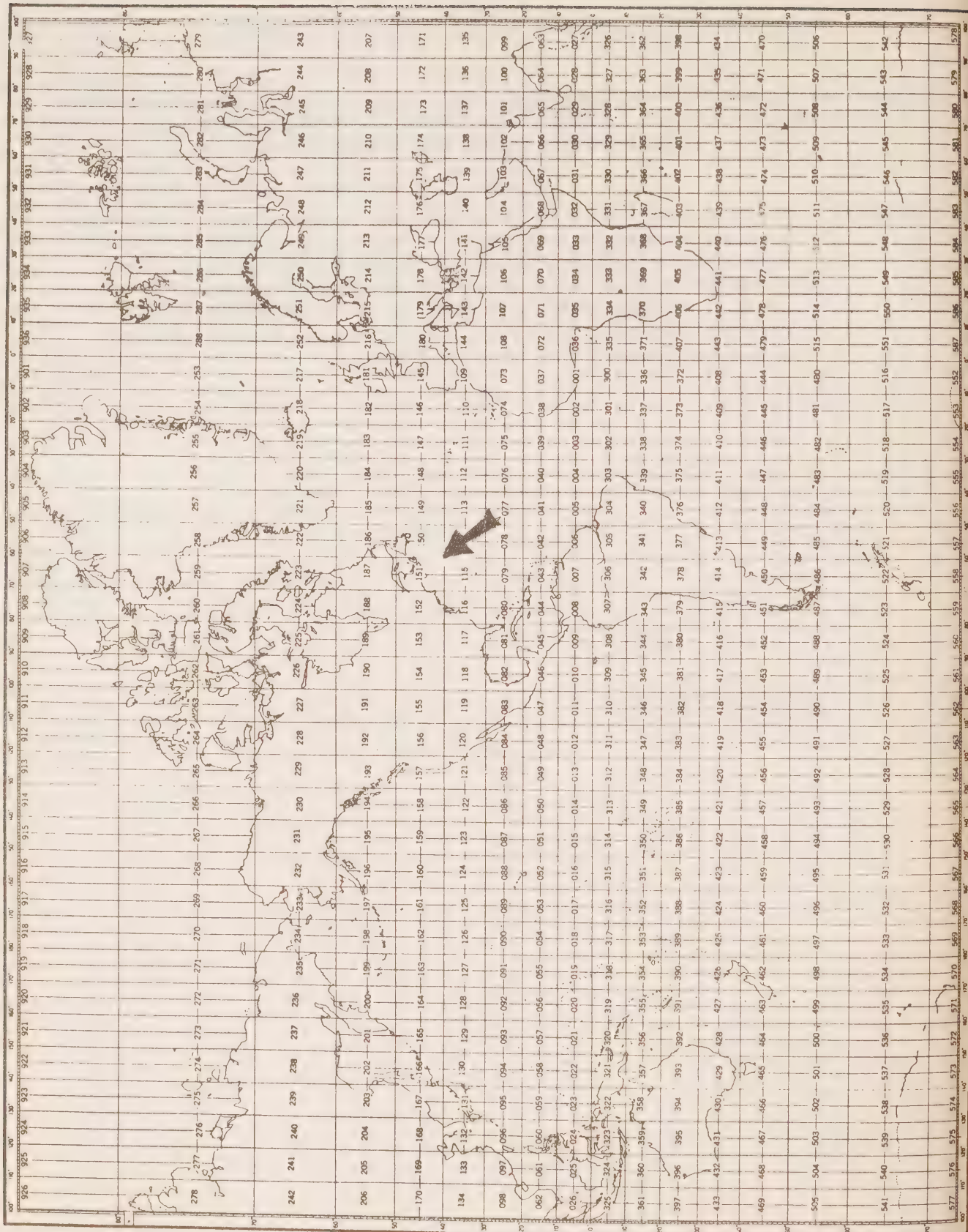
(1) DEPTH	(2) TEMP	(3) SAL	(4) OXYGEN	(5) SGMT	(6) SOUND
(7) DELTA-D	(8) POT-EN	(9) SVA.			

- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY:
- A. The reported salinity values are measured to three decimal places.
 - (i) the interpolation error estimate is less than twice the standard deviation of measurement
 - the interpolated value is reported to three decimal places (e.g., 30.139).
 - (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 - the interpolated value is reported to two decimal places, and followed by the interpolation error estimate (e.g., 29.23 C).
 - B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 - the interpolated value is reported to two decimal places, and followed by the combined measurement and interpolation error estimate (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "Introduction" to section II of the data record).

- (5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.
- (6) SOUND VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).
- (7) DELTA-D: The geo-potential anomaly as defined by:
- $$\Delta D = \int_0^p \delta \rho dp$$
- ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).
- (8) POTENTIAL ENERGY ANOMALY: The Potential energy anomaly χ as defined by:
- $$\chi = \frac{1}{g} \int_0^p \rho \delta dp = \int_0^z \rho \delta dz$$
- χ is expressed in units of 10^8 ergs/cm² and recorded to two decimal places (e.g., 116.44).
- (9) SPECIFIC VOLUME ANOMALY: The specific volume anomaly as defined by:
- $$\delta = \frac{1}{\rho} - \frac{1}{\rho_0}$$
- δ is expressed in ml/gr, and conventionally reported as $10^6 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

- ‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs
- * (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval**. The **third**, and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two interpolations between the last two observed depths.



MARSDEN SQUARE CHART

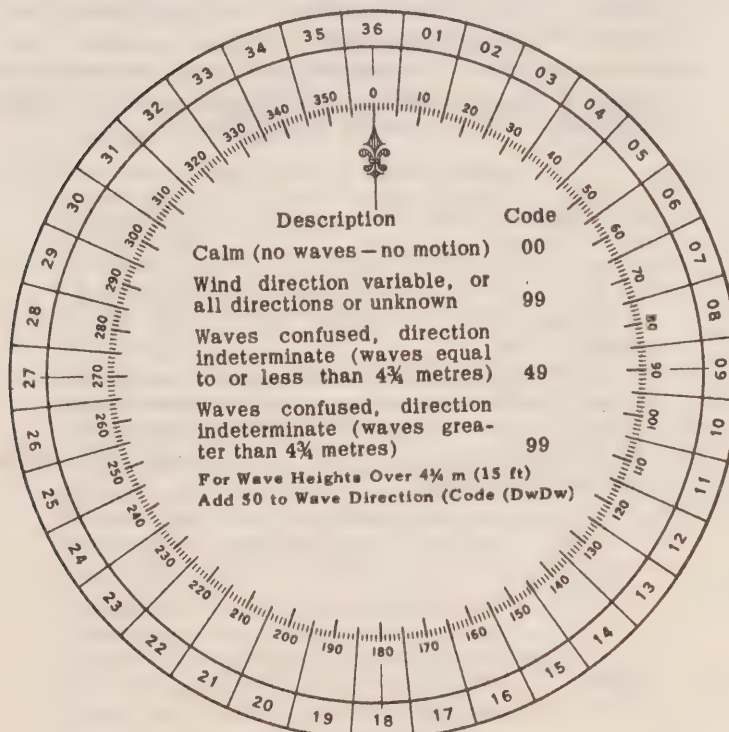
Table 1
CONVERSION
MINUTES TO $\frac{1}{10}$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (P_w)

(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (H_w)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code			Code
0	Less than ¼ m (1 ft)		0 5 m (16 ft)
1	½ m (1½ ft)		1 5½ m (17½ ft)
2	1 m (3 ft)		2 6 m (19 ft)
3	1½ m (5 ft)	Add	3 6½ m (21 ft)
4	2 m (6½ ft)	50	4 7 m (22½ ft)
5	2½ m (8 ft)	to	5 7½ m (24 ft)
6	3 m (9½ ft)	Dw Dw	6 8 m (25½ ft)
7	3½ m (11 ft)		7 8½ m (27 ft)
8	4 m (13 ft)		8 9 m (29 ft)
9	4½ m (14 ft)		9 9½ m (30½ ft) or more
x	Height not determined		

Add
50
to
Dw Dw

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure		ww	
No meteors except photometers	{	00	Cloud development not observed or not observable
		01	Clouds generally dissolving or becoming less developed
		02	State of sky on the whole unchanged
		03	Clouds generally forming or developing
Haze, dust, sand or smoke	{	characteristic change of the state of sky during the past hour	
		04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes
		05	Haze
		06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation
		07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen
		08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm
		09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour
		10	Mist
		11	{ Patches of } shallow fog or ice fog at the station, whether on land or sea, not
		12	{ More of less } deeper than about 2 metres on continuous land or 10 metres at sea
		13	Lightning visible, no thunder heard
		14	Precipitation within sight, not reaching the ground or the surface of the sea
		15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station
		16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station
		17	Thunderstorm, but no precepitation at the time of observation
		18	Squalls } at or within sight of the station during the preceding hour
		19	Funnel clouds } or at the time of observation
ww = 20 - 29			
		Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation	
		20	Drizzle (not freezing) or snow grains
		21	Rain (not freezing)
		22	Snow
		23	Rain and snow or ice pellets, type (a)
		24	Freezing drizzle or freezing rain
		25	Shower (s) of rain
		26	Shower (s) of snow, or of rain and snow
		27	Shower (s) of hail, or of rain and hail
		28	Fog or ice fog
		29	Thunderstorm (with or without precipitation)
ww = 30 - 39			
		Duststorm, sandstorm, drifting or blowing snow	
		30	{ Slight or moderate dust-storm or sand-storm
		31	{ -has decreased during the preceding hour
		32	{ -no appreciable change during the preceding hour
		33	{ -has begun or has increased during the preceding hour
		34	{ Severe dust-storm or sand-storm
		35	{ -has decreased during the preceding hour
		36	{ -no appreciable change during the preceding hour
		37	{ -has begun or has increased during the preceding hour
		38	{ Slight or moderate blowing snow
		39	{ Heavy blowing snow
		generally low (below eye level)	
		generally high (above eye level)	
ww = 40 - 49			
		Fog or ice fog at the time of observation	
		40	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer
		41	Fog or ice fog in patches
		42	Fog or ice fog, sky visible
		43	Fog or ice fog, sky invisible
		44	Fog or ice fog, sky visible
		45	Fog or ice fog, sky invisible
		46	Fog or ice fog, sky visible
		47	Fog or ice fog, sky invisible
		48	Fog, depositing rime, sky visible
		49	Fog, depositing rime, sky invisible

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

- | | | | |
|----|--|---|--------------------------------------|
| 50 | Drizzle, not freezing, intermittent | { | slight at time of observation |
| 51 | Drizzle, not freezing, continuous | | |
| 52 | Drizzle, not freezing, intermittent | { | moderate at time of observation |
| 53 | Drizzle, not freezing, continuous | | |
| 54 | Drizzle, not freezing, intermittent | { | heavy (dense) at time of observation |
| 55 | Drizzle, not freezing, continuous | | |
| 56 | Drizzle, freezing, slight | | |
| 57 | Drizzle, freezing, moderate or heavy (dense) | | |
| 58 | Drizzle and rain, slight | | |
| 59 | Drizzle and rain, moderate or heavy | | |

ww = 60 - 69 Rain

- | | | | |
|----|---|---|---------------------------------|
| 60 | Rain, not freezing, intermittent | { | slight at time of observation |
| 61 | Rain, not freezing, continuous | | |
| 62 | Rain, not freezing, intermittent | { | moderate at time of observation |
| 63 | Rain, not freezing, continuous | | |
| 64 | Rain, not freezing, intermittent | { | heavy at time of observation |
| 65 | Rain, not freezing, continuous | | |
| 66 | Rain, freezing, slight | | |
| 67 | Rain, freezing, moderate or heavy | | |
| 68 | Rain or drizzle and snow, slight | | |
| 69 | Rain or drizzle and snow, moderate or heavy | | |

70 - 79 Solid precipitation not in showers

- | | | | |
|----|---|---|---------------------------------|
| ww | | | |
| 70 | Intermittent fall of snow flakes | { | slight at time of observation |
| 71 | Continuous fall of snow flakes | | |
| 72 | Intermittent fall of snow flakes | { | moderate at time of observation |
| 73 | Continuous fall of snow flakes | | |
| 74 | Intermittent fall of snow flakes | { | heavy at time of observation |
| 75 | Continuous fall of snow flakes | | |
| 76 | Ice prisms (with or without fog) | | |
| 77 | Snow grains (with or without fog) | | |
| 78 | Isolated starlike snow crystals (with or without fog) | | |
| 79 | Ice pellets, type (a) | | |

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

- | | | | |
|----|--|---|---|
| 80 | Rain shower(s), slight | | |
| 81 | Rain shower(s), moderate or heavy | | |
| 82 | Rain shower(s), violent | | |
| 83 | Shower(s) of rain and snow mixed, slight | | |
| 84 | Shower(s) of rain and snow mixed, moderate or heavy | | |
| 85 | Snow shower(s), slight | | |
| 86 | Snow shower(s), moderate or heavy | | |
| 87 | Shower(s) of snow pellets or ice pellets, type (b), with or without rain | { | - slight |
| 88 | or rain and snow mixed | | |
| 89 | Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder | { | - moderate or heavy |
| 90 | | | |
| 91 | Slight rain at time of observation | { | thunderstorm during the preceding hour but not at time of observation |
| 92 | Moderate or heavy rain at time of observation | | |
| 93 | Slight snow, or rain and snow mixed or hail at time of observation | { | thunderstorm at time of observation |
| 94 | Moderate or heavy snow, or rain and snow mixed or hail at time of observation | | |
| 95 | Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation | { | thunderstorm at time of observation |
| 96 | Thunderstorm, slight or moderate, with hail at time of observation | | |
| 97 | Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation | { | thunderstorm at time of observation |
| 98 | Thunderstorm, combined with duststorm or sandstorm at time of observation | | |
| 99 | Thunderstorm, heavy, with hail at time of observation | | |

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{1}{4}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N.B.
04. Arctic Biological Station, St. Anne de Bellevue, P.Q.
05. Biological Station, St. John's, Nfld.
06. Station de Biologie Marine, Grande Riviere, P.Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N.S.
09. Pacific Naval Laboratory, Esquimalt, B.C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION I I I

Serial Oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Bedford Institute of Oceanography
<u>Observation platform:</u>	CNAV "Sackville"
<u>Vessel's cruising speed:</u>	11 knots
<u>Total number of stations occupied:</u>	61
<u>Anemometer height above sea level:</u>	11 metres
<u>Barometer readings</u>	Aneroid barometer (corrected)
<u>Air temperature</u>	Sling Psychrometer
<u>Wet bulb temperature</u>	Sling Psychrometer
<u>Surface sea water temperature</u>	Bucket sample - deck thermometer

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature:	0.02
Salinity:	0.004

C-REF-NO 356	YR 1962	DEPTH 55	WAVES 1 36X2	AIR T 00.1	VIS
CONS. NO 001	MONTH 3	MXSAMPD 00	WAVES 2 0542	WET B -00.2	STN 001
LAT 44-328N	DAY 06	NO.DPTH 5	WND-DIR 360	WW-CODE	
LON 59-083W	HR 11.0	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1019.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
110	0000	0020	32102		2578	14462
110	0010	0007	32102	828	2579	14458
110	0020	0007	32101	844	2579	14459
110	0030	0007	32102	835	2579	14461
110	0050	0007	32101	835	2579	14464

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0020	32102		2578	14462	0000	00000	2222
0010	0007	32102		2579	14458	0022	00001	2216
0020	0007	32101		2579	14459	0045	00005	2216
0030	0007	32102		2579	14461	0067	00010	2215
0050	0007	32101		2579	14464	0112	00029	2215

C-REF-NO 356 YR 1962 DEPTH 55 WAVES 1 36X2 AIR T 00.2 VIS
 CONS. NO 002 MONTH 3 MXSAMPD 00 WAVES 2 0442 WET B 00.1 STN 002
 LAT 44-110N DAY 06 NO.DPTH 5 WND-DIR 030 WW-CODE
 LON 58-450W HR 13.7 W-COLOR WND-SPD 06 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1020. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
137	0000	0045	32280		2591	14476
137	0010	0035	32233	867	2588	14472
137	0020	0035	32243		2589	14474
137	0030	0043	32298	861	2593	14480
137	0050	0141	32614		2613	14532

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0045	32280		2591	14476	0000	00000	2097
0010	0035	32233		2588	14472	0021	00001	2128
0020	0035	32243		2589	14474	0043	00004	2120
0030	0043	32298		2593	14480	0064	00010	2082
0050	0141	32614		2613	14532	0104	00026	1896

C-REF-NO 356	YR 1962	DEPTH 732	WAVES 1 36X2	AIR T 01.2	VIS
CONS. NO 003	MONTH 3	MXSAMP C7	WAVES 2 0442	WET B 00.8	STN 003
LAT 43-555N	DAY 06	NO.DPTH 13	WND-DIR 040	WW-CODE	
LON 58-295W	HR 16.1	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
161	0000	0350	33150		2639	14622
161	0010	0349	33144		2638	14624
161	0029	0347	33149		2639	14626
161	0068	0346	33143		2639	14632
161	0098	0381	33249	744	2644	14653
161	0205	0708	34653	480	2716	14823
161	0247	0736	34807	480	2724	14843
161	0290	0654	34755		2731	14817
161	0333	0610	34734	513	2735	14806
161	0421	0559	34858	538	2751	14802
161	0510	0517	34870	554	2757	14799
161	0601	0482	34896	563	2763	14800
161	0697	0450	34909	595	2768	14803

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0350	33150		2639	14622	0000	00000	1648
0010	0349	33144		2638	14624	0017	00001	1652
0020	0348	33146		2639	14625	0033	00003	1651
0030	0347	33148		2639	14626	0050	00008	1648
0050	0343	3314 B		2638	14627	0083	00021	1655
0075	0352	33158		2639	14636	0125	00048	1648
0100	0387	3328 C		2645	14656	0166	00085	1596
0125	0466 I	3360 I		2662	14698	0204	00128	1436
*0150	0543 I	3392 I		2679	14738	0238	00177	1281
*0175	0619 I	3425 I		2696	14777	0268	00227	1130
*0200	0693 C	3459 F		2712	14815	0295	00278	0982
0225	0732	34753		2720	14837	0319	00330	0914
0250	0731	34806		2724	14841	0341	00385	0879
0300	0642	34746		2732	14813	0384	00505	0809
0400	0568	3482 C		2747	14802	0459	00770	0671
0500	0521	34871		2757	14800	0522	01063	0590
0600	0482	34896		2763	14800	0579	01383	0535
0700	0449	34910		2768	14803	0631	01730	0496

C-REF-NO 356 YR 1962 DEPTH 2402 WAVES 1 36X3 AIR T 01.2 VIS
 CONS. NO 004 MONTH 3 MXSAMPD 22 WAVES 2 0442 WET B 00.6 STN 004
 LAT 43-390N DAY 06 NO.DPTH 19 WND-DIR 020 WW-CODE
 LON 58-122W HR 20.0 W-COLOR WND-SPD 09 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1019. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
200	0000	0295	33055		2636	14598
200	0010	0295	33056		2636	14599
200	0029	0296	33053		2636	14603
200	0073	0362	33228		2644	14641
200	0097	0850	34419	554	2676	14857
200	0146	0841	34710	570	2700	14865
200	0195	0765	34708	570	2712	14844
200	0244	0755	34828		2723	14850
200	0294	0672	34820	529	2734	14825
200	0392	0555	34882	513	2754	14796
200	0478	0498	34901	546	2762	14787
200	0581	0472	34948	596	2769	14794
200	0686	0441	34937		2771	14798
200	0802	0424	34949	635	2774	14810
200	1022	0406	34955	645	2777	14840
200	1140	0394	34948	653	2777	14854
200	1493	0374	34953	662	2780	14905
200	2095	0344	34954	653	2783	14994
200	2213	0334	34953	653	2784	15010

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0295	33055		2636	14598	0000	00000	1673
0010	0295	33056		2636	14599	0017	00001	1672
0020	0294	33052		2636	14600	0034	00003	1676
0030	0291 B	3304 B		2635	14601	0051	00008	1681
0050	0255 I	3296 I		2632	14587	0085	00022	1716
0075	0403 D	3333 E		2648	14660	0126	00048	1570
0100	0870 F	3448 F		2678	14865	0162	00080	1294
0125	0932 I	3478 I		2691	14896	0193	00116	1174
0150	0835	3471 B		2702	14863	0222	00156	1080
0175	0796 C	3472 D		2708	14853	0248	00200	1023
0200	0764	34720		2713	14845	0273	00249	0980
0225	0759 C	3478 C		2718	14848	0298	00301	0932
0250	0747	34830		2724	14847	0320	00357	0883
0300	0663	34823		2735	14823	0362	00475	0781
0400	0548	34884		2755	14794	0432	00721	0601
0500	0491	34912		2764	14788	0489	00981	0522
0600	0466	34947		2769	14794	0539	01265	0477

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0438	34938		2772	14799	0587	01583	0462
0800	0424	34949		2774	14810	0633	01937	0447
1000	0408	34955		2776	14837	0723	02770	0442
1200	0390	34948		2778	14863	0813	03788	0444

C-REF-NO 356 YR 1962 DEPTH 3500 WAVES 1 04X3 AIR T 01.9 VIS
 CONS. NO 005 MONTH 3 MXSAMPD 20 WAVES 2 0582 WET B 00.7 STN 005
 LAT 43-230N DAY 07 NO.DPTH 18 WND-DIR 020 WW-CODE
 LON 57-550W HR 00.8 W-COLOR WND-SPD 05 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1019. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
008	0000	0340	32015		2549	14603
008	0009	0308	32017		2552	14591
008	0019	0308	32016		2552	14592
008	0066	0313	32032		2553	14602
008	0095	0752	34031	629	2660	14814
008	0147	1033	35011	463	2692	14940
008	0200	0815	34747	496	2707	14864
008	0253	0730	34775		2722	14841
008	0305	0804	35027	397	2731	14881
008	0411	0587	34880	504	2750	14812
008	0494	0534	34933	529	2760	14805
008	0592	0492	34957	563	2767	14804
008	0689	0476	34975		2770	14814
008	0787	0454	34985	604	2774	14821
008	0979	0417	34965	645	2776	14837
008	1193	0387	34947	670	2778	14860
008	1488	0373	34963	662	2781	14904
008	2035	0351	34952	653	2782	14987

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0340	32015		2549	14603	0000	00000	2496
0010	0307	32017		2552	14590	0025	00001	2468
0020	0304 B	3200 D		2551	14590	0050	00005	2482
0030	0270 I	3184 I		2541	14575	0075	00012	2573
*0050	0262 I	3180 I		2539	14574	0127	00033	2597
0075	0442 I	3263 I		2588	14667	0187	00070	2135
0100	0804 B	3423 H		2668	14837	0231	00109	1388
0125	0984 C	3488 I		2690	14917	0264	00146	1187
0150	1026 C	3501 D		2693	14938	0293	00188	1163
0175	0941 I	3493 I		2702	14910	0322	00235	1087
0200	0815	34747		2707	14864	0348	00286	1034
0225	0757	34728		2714	14846	0374	00341	0968
0250	0731	34766		2721	14841	0397	00399	0908
0300	0796 B	3500 B		2730	14877	0441	00523	0836
0400	0617 E	3491 D		2748	14822	0517	00792	0670
0500	0531	34935		2761	14804	0579	01075	0554
0600	0490	34959		2768	14805	0632	01374	0498
0700	0474	34977		2771	14815	0681	01703	0476

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0451	34984		2774	14822	0728	02065	0454
1000	0413	34963		2776	14839	0819	02905	0444
1200	0386	34947		2778	14861	0909	03920	0440
1500	0365 B	3495 C		2780	14903	1043	05780	0439
2000	0351	34951		2782	14981	1270	09903	0458

C-REF-NO 356	YR 1962	DEPTH 4023	WAVES 1 04X3	AIR T 03.0	VIS
CONS. NO 006	MONTH 3	MXSAMPD 26	WAVES 2 0582	WET B 02.5	STN 006
LAT 43-000N	DAY 07	NO.DPTH 11	WND-DIR 040	WW-CODE	
LON 57-300W	HR 06.7	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1016.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
067	0000	0560	33420		2638	14714
067	0230	0740	34739		2718	14840
067	0300	0678	34817	462	2733	14829
067	0430	0538	34872	521	2755	14795
067	0577	0477	34894	571	2764	14794
067	0783	0432	34952	629	2774	14811
067	1135	0400	34952	653	2777	14856
067	1455	0376	34952		2779	14900
067	1780	0358	34958	662	2782	14947
067	2253	0334	34963		2784	15017
067	2570	0316	34950	653	2785	15064

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0560	33420		2638	14714	0000	00000	1659
0010	0575	33499		2642	14723	0016	00001	1618
0020	0590	3358 B		2646	14731	0033	00003	1579
*0030	0604 B	3365 B		2650	14739	0048	00007	1541
*0050	0630 C	3379 C		2658	14755	0079	00020	1467
*0075	0657 C	3396 D		2668	14772	0114	00043	1381
*0100	0680 D	3412 E		2677	14787	0148	00073	1300
*0125	0698 E	3426 F		2686	14801	0180	00109	1223
*0150	0712 E	3438 G		2694	14812	0210	00151	1151
*0175	0720 F	3449 G		2701	14821	0238	00198	1083
*0200	0724 F	3459 G		2709	14827	0265	00249	1019
*0225	0723 F	3468 H		2715	14832	0290	00304	0958
0250	0726	34771		2722	14839	0313	00361	0897
0300	0678	34817		2733	14829	0356	00481	0805
0400	0568 B	34866		2751	14802	0429	00739	0639
0500	0501 B	34884		2760	14791	0489	01016	0555
0600	0470	34901		2765	14796	0543	01322	0517
0700	0446	34929		2770	14802	0594	01657	0478
0800	0430	34953		2774	14813	0640	02019	0450
1000	0409	3496 B		2777	14837	0731	02853	0440
1200	0395	34952		2777	14865	0821	03872	0447
1500	0373	34953		2780	14906	0956	05763	0446
2000	0347	34962		2783	14980	1183	09844	0444
2500	0320	34953		2785	15054	1410	15135	0449

C-REF-NO 356	YR 1962	DEPTH 1600	WAVES 1 05X4	AIR T 00.8	VIS
CONS. NO 007	MONTH 3	MXSAMPD 15	WAVES 2 0582	WET B -00.3	STN 007
LAT 44-130N	DAY 07	NO.DPTH 17	WND-DIR 110	WW-CODE	
LON 57-080W	HR 22.5	W-COLOR	WND-SPD 12	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1015.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
225	0000	0285	32990		2632	14592
225	0007	0288	32992		2632	14595
225	0023	0288	32989		2631	14597
225	0070	0317				
225	0090	0322	33076	778	2635	14624
225	0151	1131	35172	463	2687	14978
225	0200	0978	35035	463	2704	14929
225	0249	0784	34805		2716	14861
225	0308	0648	34796	471	2735	14818
225	0419	0475	34764	645	2754	14766
225	0477	0466	34762	562	2755	14772
225	0585	0460	34910	596	2767	14789
225	0680	0434	34926		2771	14794
225	0788	0408	34938	662	2775	14801
225	1016	0392	34931	662	2776	14832
225	1252	0387	34941	662	2777	14870
225	1489	0371	34949	662	2780	14903

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0285	32990		2632	14592	0000	00000	1714
0010	0288	32991		2632	14595	0017	00001	1716
0020	0288	32990		2632	14597	0035	00004	1717
0030	0292	3294 H		2627	14599	0052	00008	1758
0050	0303 B	3288 I		2621	14607	0088	00023	1818
0075	0312 B	3295 I		2626	14616	0133	00052	1771
0100	0452 I	3344 I		2652	14686	0175	00089	1536
0125	0781 I	3432 I		2678	14833	0211	00130	1292
*0150	1117 C	3514 C		2687	14972	0242	00174	1225
0175	1103 I	3521 I		2695	14972	0272	00224	1153
0200	0978	35035		2704	14929	0300	00278	1076
0225	0877 C	3491 C		2710	14894	0327	00335	1012
0250	0781	34804		2717	14860	0351	00396	0952
0300	0662	3479 B		2732	14822	0396	00520	0805
0400	0494	34769		2752	14770	0468	00774	0620
0500	0465	3479 C		2757	14775	0528	01054	0581
0600	0456	34916		2768	14790	0582	01357	0489
0700	0429	34929		2772	14795	0630	01676	0457
0800	0406	34938		2775	14803	0675	02023	0434

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
1000	0392	34932		2776	14830	0764	02844	0440
1200	0388	34938		2777	14862	0854	03866	0449
1500	0370	34950		2780	14905	0990	05756	0444

C-REF-NO 356	YR 1962	DEPTH 1260	WAVES 1 06X4	AIR T 01.0	VIS
CONS. NO 008	MONTH 3	MXSAMP 10	WAVES 2 0582	WET B -00.2	STN 008
LAT 44-225N	DAY 08	NO.DPTH 15	WND-DIR 050	WW-CODE	
LON 56-415W	HR 04.0	W-COLOR	WND-SPD 12	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1016.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
040	0000	0230	32940		2632	14568
040	0010	0255	32957		2632	14580
040	0029	0326	33077		2635	14616
040	0065	0452	33445		2652	14680
040	0091		33531			
040	0136	0746	34324		2684	14822
040	0185	0676	34547		2712	14805
040	0232	0732	34815		2725	14839
040	0278	0636	34775		2735	14808
040	0377	0477	34714		2750	14759
040	0486	0474	34886		2764	14778
040	0597	0438	34907		2769	14782
040	0701	0431	34949		2773	14797
040	0791	0426	34952		2774	14809
040	1026	0386	34930		2777	14832

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0230	32940		2632	14568	0000	00000	1709
0010	0255	32957		2632	14580	0017	00001	1715
0020	0291	33010		2633	14598	0034	00004	1704
0030	0329	33088		2636	14618	0051	00008	1679
0050	0399	3330 E		2646	14654	0084	00021	1586
0075	0506 E	3347 D		2648	14704	0124	00047	1568
0100	0622 I	3368 I		2650	14759	0163	00082	1551
0125	0714 F	3412 I		2673	14805	0200	00124	1345
0150	0731 F	3442 F		2694	14819	0231	00168	1149
0175	0694 E	3453 E		2707	14811	0259	00213	1023
0200	0696 E	3465 C		2717	14817	0283	00261	0940
0225	0725 C	3478 B		2723	14834	0306	00311	0883
0250	0702 C	3482 C		2729	14830	0328	00364	0831
0300	0591 B	3475 B		2739	14793	0368	00475	0741
0400	0470 C	3475 C		2753	14760	0436	00717	0610
0500	0470	34892		2765	14779	0492	00976	0511
0600	0438	34908		2769	14782	0542	01256	0473
0700	0431	34949		2773	14796	0589	01566	0445
0800	0423	3496 B		2775	14810	0633	01910	0437
1000	0391	34938		2777	14830	0721	02728	0435

C-REF-NO 356 YR 1962 DEPTH 1152 WAVES 1 05X4 AIR T -00.5 VIS
 CONS. NO 009 MONTH 3 MXSAMPD 10 WAVES 2 0582 WET B -01.5 STN 009
 LAT 44-310N DAY 08 NO.DPTH 15 WND-DIR 100 WW-CODE
 LON 56-180W HR 10.2 W-COLOR WND-SPD 12 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1015. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
102	0000	0150	32710		2620	14529
102	0009	0154	32717		2620	14532
102	0028	0154	32719		2620	14536
102	0070	0397	33324		2648	14656
102	0094	0903	34692	546	2689	14880
102	0141	0859	34831	512	2707	14873
102	0168	0805	34837	496	2716	14857
102	0211	0765	34833		2721	14848
102	0255	0675	34813	486	2733	14820
102	0344	0562	34829	521	2749	14790
102	0436	0463	34859	546	2763	14765
102	0539	0454	34917	521	2768	14779
102	0631	0413	34908		2772	14777
102	0740	0406	34919	627	2774	14792
102	0970	0397	34929	627	2775	14827

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0150	32710		2620	14529	0000	00000	1829
0010	0153	32715		2620	14532	0018	00001	1827
0020	0151 B	3271 B		2620	14533	0037	00004	1830
0030	0153 B	3271 C		2620	14535	0055	00009	1828
0050	0209 I	3284 I		2626	14565	0091	00023	1769
0075	0506 I	3361 I		2659	14707	0132	00049	1461
0100	0937 I	3481 I		2693	14895	0165	00078	1157
0125	0954 I	3498 I		2703	14907	0193	00110	1061
0150	0841	34836		2710	14867	0219	00147	0998
0175	0798 B	34837		2717	14855	0243	00187	0938
0200	0775 B	34836		2720	14850	0267	00232	0910
0225	0738 B	34827		2725	14840	0289	00281	0869
0250	0686	34815		2731	14824	0310	00333	0809
0300	0611 B	34816		2741	14802	0349	00441	0718
0400	0496 B	34845		2758	14772	0414	00670	0566
0500	0453 C	34898		2767	14772	0467	00914	0488
0600	0427	34913		2771	14778	0515	01183	0456
0700	0406	34914		2773	14785	0560	01487	0442
0800	0389 D	34914		2775	14795	0604	01827	0431

C-REF-NO 356	YR 1962	DEPTH 575	WAVES 1 04X4	AIR T -00.5	VIS
CONS. NO 010	MONTH 3	MXSAMPD 06	WAVES 2 0482	WET B -01.4	STN 010
LAT 44-425N	DAY 08	NO.DPTH 12	WND-DIR 040	WW-CODE	
LON 55-520W	HR 14.7	W-COLOR	WND-SPD 12	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1015.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
147	0000	0078	32630		2618	14496
147	0011	0094	32638		2617	14505
147	0031	0093	32643		2618	14508
147	0069	0112	32761		2626	14524
147	0092	0247	33328		2662	14595
147	0138	0836	34671		2698	14861
147	0184	0730	34651		2712	14828
147	0230	0724	34812		2726	14835
147	0276	0650	34804		2735	14814
147	0360	0567	34823		2748	14794
147	0452	0478	34889		2763	14774
147	0569	0467	34926		2768	14789

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0078	32630		2618	14496	0000	00000	1847
0010	0088 B	32632		2617	14502	0019	00001	1851
0020	0095	32639		2617	14507	0037	00004	1850
0030	0093	32642		2618	14508	0056	00009	1846
0050	0085 E	3263 I		2617	14507	0093	00024	1851
0075	0138	3289 C		2635	14538	0138	00052	1686
0100	0359 I	3360 I		2674	14649	0176	00086	1324
0125	0683 I	3435 I		2695	14796	0206	00121	1135
0150	0837 I	3472 I		2702	14864	0234	00160	1076
0175	0774 I	3470 I		2710	14844	0261	00204	1004
0200	0726 C	3471 C		2717	14830	0285	00251	0937
0225	0724 B	3479 B		2724	14834	0308	00301	0873
0250	0695 B	3482 B		2730	14827	0329	00353	0819
0300	0623	34805		2739	14807	0369	00463	0741
0400	0524 B	34851		2755	14784	0436	00702	0595
0500	0473 C	3490 B		2764	14780	0492	00959	0514

C-REF-NO 356	YR 1962	DEPTH 105	WAVES 1 05X4	AIR T -01.0	VIS
CONS. NO 011	MONTH 3	MXSAMPD 01	WAVES 2 0582	WET B -01.9	STN 011
LAT 45-060N	DAY 08	NO.DPTH 5	WND-DIR 040	WW-CODE	
LON 55-300W	HR 19.1	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1014.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
191	0000	0070	32480		2606	14490
191	0010	0065	32483		2607	14489
191	0030	0047	32543		2612	14485
191	0074	-0014	32791		2635	14468
191	0099	-0019	32826		2638	14470

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0070	32480		2606	14490	0000	00000	1957
0010	0065	32483		2607	14489	0020	00001	1952
0020	0057	32506		2609	14488	0039	00004	1930
0030	0047	32543		2612	14485	0058	00009	1897
0050	0017 B	3266 D		2623	14476	0096	00024	1792
0075	-0005 C	3275 G		2632	14472	0140	00052	1710
0100	-0019	32829		2639	14470	0182	00090	1645

C-REF-NO 356	YR 1962	DEPTH 1006	WAVES 1 05X3	AIR T 05.4	VIS
CONS. NO 012	MONTH 3	MXSAMPD 08	WAVES 2 0582	WET B 05.3	STN 012
AT 44-470N	DAY 08	NO.DPTH 14	WND-DIR 040	WW-CODE	
ON 55-320W	HR 21.9	W-COLOR	WND-SPD 09	CLD-TPE	
ARSD SQ 150	C/I 1801	W-TRNSP	BARO 1014.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
219	0000	0170	32760		2622	14539
219	0007	0178	32753		2621	14543
219	0019	0178	32758		2622	14545
219	0069	0187	32782		2623	14558
219	0089	0328	33413	712	2662	14631
219	0138	0932	34859	546	2698	14900
219	0186	0615	34505	546	2716	14781
219	0231	0636	34646		2725	14798
219	0276	0626	34782	579	2737	14804
219	0376	0526	34823	546	2753	14780
219	0475	0474	34901	596	2765	14776
219	0576	0422	34888	612	2770	14771
219	0683	0419	34915		2772	14788
219	0792	0402	34918	662	2774	14799

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0170	32760		2622	14539	0000	00000	1803
0010	0179	32753		2621	14544	0018	00001	1815
0020	0176	3275 B		2621	14544	0036	00004	1817
0030	0158 G	3267 I		2616	14537	0055	00009	1866
*0050	0154 I	3264 I		2614	14538	0093	00024	1883
0075	0222	3295 C		2634	14577	0138	00053	1695
0100	0488 I	3382 I		2678	14706	0175	00086	1287
0125	0800 I	3457 I		2696	14844	0206	00121	1129
0150	0878 I	3483 I		2704	14881	0233	00159	1060
0175	0712 I	3464 I		2714	14819	0259	00202	0963
0200	0607 F	3453 D		2719	14780	0283	00247	0915
0225	0625 C	3461 B		2724	14793	0305	00297	0875
0250	0635	34708		2730	14802	0327	00349	0821
0300	0605 C	3481 C		2741	14799	0365	00458	0716
0400	0511	34844		2756	14779	0431	00690	0585
0500	0459	34900		2766	14774	0485	00940	0493
0600	0420	34893		2770	14774	0534	01212	0463
0700	0406 C	3491 B		2773	14785	0580	01520	0447
0800	0402	34919		2774	14801	0625	01867	0443

C-REF-NO 356	YR 1962	DEPTH 2104	WAVES 1 05X4	AIR T 00.0	VIS
CONS. NO 013	MONTH 3	MXSAMPD 17	WAVES 2 0526	WET B -01.0	STN 013
LAT 44-275N	DAY 09	NO. CPTH 18	WND-DIR 040	WW-CODE	
LON 55-300W	HR 00.7	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1013.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
007	0000	0260	33040		2638	14582
007	0008	0295	33042		2635	14599
007	0023	0294	33044		2635	14601
007	0068	0345	33159		2640	14632
007	0090	0362	33420	745	2659	14646
007	0139	0801	34707	513	2706	14849
007	0188	0801	34862	463	2718	14859
007	0234	0728	34799		2724	14837
007	0289	0635	34741	513	2732	14809
007	0357	0513	34765	629	2750	14771
007	0392	0501	34779	563	2752	14772
007	0434	0497	34870	563	2760	14779
007	0518	0478	34919		2766	14785
007	0600	0431	34918	604	2771	14779
007	0758	0401	34907	679	2773	14793
007	0936	0380	34903	679	2775	14814
007	1205	0370	34909	695	2777	14854
007	1682	0367	34941	679	2779	14934

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT. EN	SVA
0000	0260	33040		2638	14582	0000	00000	1656
0010	0297	33042		2635	14600	0017	00001	1685
0020	0297 B	33043		2635	14602	0034	00003	1685
0030	0300 B	3304 B		2634	14604	0051	00008	1691
0050	0321 B	3307 D		2635	14617	0085	00022	1686
0075	0345 B	33224		2645	14633	0126	00048	1592
0100	0447 I	3369 I		2672	14687	0163	00081	1344
0125	0670 I	3435 I		2697	14791	0194	00116	1117
0150	0824 E	3480 G		2710	14860	0221	00154	0998
0175	0826 F	3489 G		2717	14867	0245	00195	0943
0200	0786	3486 B		2720	14855	0269	00240	0912
0225	0745	3482 B		2723	14843	0291	00289	0885
0250	0702	34778		2726	14829	0313	00343	0859
0300	0611 B	34741		2736	14801	0354	00458	0773
0400	0500	34795		2753	14773	0424	00705	0608
0500	0484	34918		2765	14785	0481	00963	0509
0600	0431	34918		2771	14779	0529	01238	0458
0700	0407 B	34911		2773	14786	0575	01543	0444

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0395	34905		2774	14797	0620	01890	0445
1000	0376	34903		2776	14823	0710	02722	0442
1200	0370	34909		2777	14854	0800	03745	0448
1500	0362	34924		2779	14901	0937	05651	0452

C-REF-NO 356	YR 1962	DEPTH 3000	WAVES 1 05X4	AIR T -00.3	VIS
CONS. NO 014	MONTH 3	MXSAMPC 27	WAVES 2 0526	WET B -01.2	STN 014
LAT 44-090N	DAY 09	NO.DPTH 18	WND-DIR 040	WW-CODE	
LON 55-300W	HR 04.5	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1013.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
045	0000	0260	33290		2658	14586
045	0009	0396	33296		2646	14645
045	0027	0398	33295		2646	14649
045	0078	0404	33313		2646	14660
045	0106	0498	33590		2658	14708
045	0157	0822	34769		2708	14860
045	0213	0718	34758		2722	14829
045	0264	0609	34761		2737	14795
045	0321	0589	34885		2750	14798
045	0430	0486	34855		2760	14773
045	0542	0462	34945		2770	14783
045	0666	0422	34956		2775	14787
045	0806	0425	34964		2775	14812
045	0948	0417	34957		2776	14832
045	1223	0394	34963		2778	14868
045	1514	0376	34956		2780	14910
045	1950	0353	34950		2782	14973
045	2680	0293	34949		2787	15073

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0260	33290		2658	14586	0000	00000	1467
0010	0401 B	33296		2645	14648	0015	00001	1586
0020	0419 G	33296		2644	14657	0031	00003	1604
0030	0395	3329 B		2645	14649	0048	00007	1589
0050	0387 E	3326 F		2644	14648	0080	00021	1601
*0075	0401	3330 B		2646	14658	0120	00046	1585
0100	0473	33512		2655	14695	0159	00081	1504
0125	0631 I	3405 I		2678	14771	0194	00122	1292
0150	0784 F	3462 I		2702	14843	0224	00163	1078
0175	0816 H	3484 I		2714	14862	0249	00206	0963
0200	0764 G	3482 I		2721	14846	0273	00251	0906
0225	0689 B	34754		2726	14820	0295	00300	0856
0250	0635 B	34754		2733	14803	0316	00350	0787
0300	0591 C	3484 B		2746	14795	0353	00454	0676
0400	0515 C	3488 D		2758	14780	0416	00677	0566
0500	0467 B	3491 B		2766	14778	0469	00923	0496
0600	0442	34956		2773	14784	0517	01190	0442
0700	0421	34959		2775	14792	0561	01483	0426

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0424	34964		2775	14811	0604	01820	0436
1000	0413	34958		2776	14839	0694	02649	0447
1200	0396	34962		2778	14865	0783	03668	0441
1500	0377	34956		2780	14908	0919	05551	0448
2000	0347	34949		2782	14979	1148	09687	0453
2500	0308	34948		2786	15049	1374	14938	0436

C-REF-NO 356 YR 1962 DEPTH 3380 WAVES 1 05X4 AIR T 00.5 VIS
 CONS. NO 015 MONTH 3 MXSAMP 20 WAVES 2 0582 WET B -01.5 STN 015
 LAT 43-500N DAY 09 NO.DPTH 18 WND-DIR 040 WW-CODE
 LON 55-310W HR 08.7 W-COLOR WND-SPD 09 CLD-TPE
 MARSQ SQ 150 C/I 1801 W-TRNSP BARO 1013. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
087	0000	0315	33230		2648	14609
087	0014	0376	33234		2643	14637
087	0037	0381	33241		2643	14643
087	0089	0711	34073		2670	14797
087	0117	1032	35029	471	2694	14935
087	0174	0863	34894	463	2711	14880
087	0226	0689	34769	480	2727	14820
087	0278	0658	34841		2737	14818
087	0336	0618	34888	480	2746	14812
087	0446	0502	34890	472	2761	14783
087	0559	0490	34963	579	2768	14798
087	0576	0471	34947	620	2769	14792
087	0666	0461	34974		2772	14804
087	0759	0438	34965	629	2774	14809
087	0965	0423	34981	645	2777	14838
087	1150	0404	34973	654	2778	14860
087	1471	0382	34972	654	2780	14905
087	2006	0353	34957	654	2782	14983

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0315	33230		2648	14609	0000	00000	1557
0010	0339 G	3321 D		2644	14620	0016	00001	1596
0020	0379 C	3323 B		2642	14639	0032	00003	1619
0030	0381 D	3323 B		2642	14642	0048	00008	1620
0050	0427 B	33338		2646	14666	0081	00021	1582
0075	0583 B	33733		2659	14740	0119	00045	1460
0100	0847 G	3447 I		2680	14857	0153	00076	1270
0125	1042 I	3509 I		2697	14941	0183	00110	1123
0150	1003 I	3512 I		2706	14931	0211	00149	1043
0175	0859	34891		2712	14879	0236	00191	0989
0200	0768 C	3482 B		2720	14848	0260	00237	0913
*0225	0692	34770		2727	14821	0283	00286	0847
0250	0666 C	3479 B		2732	14815	0303	00336	0800
0300	0644	34863		2741	14816	0342	00445	0726
0400	0547 C	3489 B		2755	14794	0408	00681	0594
0500	0493 B	3493 B		2765	14789	0464	00938	0515
0600	0474 B	3497 B		2770	14798	0514	01220	0474
0700	0453	34972		2773	14806	0561	01533	0454

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0433	34967		2775	14814	0607	01883	0444
1000	0419	34980		2777	14842	0696	02711	0438
1200	0400	34973		2779	14867	0785	03718	0439
1500	0378	34967		2780	14908	0919	05582	0442
2000	0353	34957		2782	14982	1147	09713	0457

C-REF-NO 356 YR 1962 DEPTH 3840 WAVES 1 02X4 AIR T 01.0 VIS
 CONS. NO 016 MONTH 3 MMSAMPD 21 WAVES 2 0582 WET B -00.9 STN 016
 LAT 43-300N DAY 09 NO.DPTH 18 WND-DIR 040 WW-CODE
 LON 55-300W HR 13.4 W-COLOR WND-SPD 09 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1014. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
134	0000	0435	33490		2657	14663
134	0012	0486	33496		2652	14686
134	0031	0487	33503		2653	14690
134	0075	0494	33509		2652	14700
134	0099	0525	33574	728	2654	14718
134	0150	0833	34679	505	2699	14862
134	0199	0832	34866	455	2714	14872
134	0248	0752	34831		2723	14849
134	0302	0699	34871	455	2734	14838
134	0401	0548	34897	521	2756	14794
134	0500	0538	34990	488	2764	14808
134	0604	0484	34976	637	2770	14803
134	0698	0452	34968		2773	14805
134	0801	0392	34904	695	2774	14796
134	1016	0385	34922	679	2776	14829
134	1219	0378	34944	662	2779	14861
134	1536	0368	34945	679	2780	14910
134	2095	0353	34948	670	2781	14998

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0435	33490		2657	14663	0000	00000	1472
0010	0467 D	33495		2654	14678	0015	00001	1502
0020	0492 B	33499		2652	14690	0030	00003	1526
0030	0488	33503		2652	14690	0046	00007	1520
0050	0486 B	3350 B		2652	14692	0076	00020	1524
0075	0494	33509		2652	14700	0115	00044	1527
0100	0531	3359 B		2655	14721	0153	00079	1507
0125	0681 I	3411 I		2677	14792	0188	00119	1306
0150	0833	34679		2699	14862	0219	00162	1102
0175	0856 D	3484 G		2708	14877	0245	00206	1020
0200	0831	34866		2714	14872	0270	00254	0970
0225	0793 B	3486 C		2719	14861	0294	00307	0925
0250	0750	34832		2724	14849	0317	00362	0886
0300	0701	34869		2734	14838	0360	00482	0798
0400	0549	34897		2756	14795	0430	00729	0593
0500	0538	34990		2764	14808	0486	00988	0522
0600	0486	34978		2769	14803	0537	01273	0479
0700	0451	34967		2773	14805	0584	01588	0455

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0393	34905		2774	14796	0629	01938	0442
1000	0383	34917		2776	14826	0719	02766	0440
1200	0379	34942		2778	14858	0807	03769	0434
1500	0369	34946		2780	14904	0941	05634	0445
2000	0355	34952		2782	14983	1172	09815	0463

C-REF-NO 356	YR 1962	DEPTH 4023	WAVES 1 32X4	AIR T 01.5	VIS
CONS. NO 017	MONTH 3	MXSAMPD 27	WAVES 2 3282	WET B 00.0	STN 017
LAT 43-000N	DAY 09	NO.DPTH 22	WND-DIR 040	WW-CODE	
LON 55-300W	HR 18.7	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1014.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
187	0000	0685	34145		2679	14773
187	0010	0751	34148		2670	14801
187	0023	0753	34153		2670	14804
187	0062	0755	34169		2671	14811
187	0079	0760	34167	679	2670	14816
187	0114	0779	34227	679	2672	14830
187	0148	1025	34969	497	2690	14937
187	0187	0991	35082		2705	14932
187	0222	0909	34918	472	2706	14906
187	0294	0753	34851	455	2725	14857
187	0362	0703	34899	438	2736	14850
187	0437	0548	34801	513	2748	14799
187	0458	0487	34824		2757	14778
187	0587	0493	34954	587	2767	14803
187	0765	0406	34892	662	2772	14796
187	0786	0400	34894	662	2772	14797
187	0952	0387	34909	662	2775	14819
187	1281	0365	34907	687	2777	14865
187	1630	0375	34957		2780	14929
187	1975	0362	34964	653	2782	14982
187	2415	0335	34952		2784	15045
187	2688	0311	34946	653	2785	15082

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0685	34145		2679	14773	0000	00000	1268
0010	0751	34148		2670	14801	0013	00001	1355
0020	0757 B	34152		2669	14805	0027	00003	1362
0030	0753	34157		2670	14805	0041	00006	1355
0050	0754	34166		2671	14809	0068	00018	1353
0075	0759	34167		2670	14815	0102	00039	1362
0100	0756 E	3416 F		2670	14818	0137	00070	1372
0125	0860 I	3446 I		2678	14866	0170	00109	1298
0150	1028	34988		2691	14939	0201	00153	1183
0175	1023 E	3511 D		2701	14942	0230	00201	1093
0200	0963	3503 C		2706	14924	0257	00253	1055
0225	0901	34910		2707	14903	0284	00311	1050
0250	0841 B	3486 C		2712	14884	0310	00374	0997
0300	0748 B	34856		2726	14857	0357	00506	0875

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0637	3484 E		2740	14829	0439	00798	0747
0500	0468 E	3482 C		2759	14777	0505	01098	0560
0600	0484	34947		2767	14802	0558	01400	0500
0700	0430	34908		2770	14795	0607	01728	0474
0800	0397	34891		2772	14798	0655	02092	0457
1000	0383	34909		2775	14826	0746	02938	0446
1200	0369	34907		2777	14853	0837	03965	0448
1500	0371	34938		2779	14905	0974	05874	0453
2000	0361	34964		2782	14986	1206	10081	0463
2500	0328	34953		2784	15057	1442	15547	0461

C-REF-NO 356 YR 1962 DEPTH 4206 WAVES 1 31X4 AIR T 03.9 VIS
 CONS. NO 018 MONTH 3 MXSAMPD 28 WAVES 2 3682 WET B 02.2 STN 018
 LAT 42-250N DAY 10 NO.DPTH 19 WND-DIR 080 WW-CODE
 LON 56-530W HR 05.6 W-COLOR WND-SPD 10 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1012. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
056	0000	0650	33730		2651	14754
056	0008	0616	33742		2656	14742
056	0029	0652	33828		2658	14761
056	0073	0725	34008		2662	14799
056	0099	0849	34305	662	2667	14855
056	0149	0935	34889	472	2699	14903
056	0204	0835	34894	439	2716	14875
056	0251	0823	34997		2726	14879
056	0307	0673	34856	447	2736	14828
056	0416	0565	34886	505	2753	14804
056	0524	0503	34950	579	2765	14797
056	0631	0449	34937	596	2770	14792
056	0717	0423	34918		2772	14795
056	0822	0403	34918	654	2774	14805
056	1035	0391	34931	662	2776	14835
056	1259	0381	34941	670	2778	14869
056	1599	0363	34942	662	2780	14918
056	2173	0341	34969	662	2784	15007
056	2762	0302	34953	654	2787	15091

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0650	33730		2651	14754	0000	00000	1534
0010	0616 B	33748		2657	14742	0015	00001	1479
0020	0626 D	33786		2658	14748	0030	00003	1464
0030	0653	33830		2658	14761	0045	00007	1467
0050	0676 D	3389 D		2660	14775	0074	00019	1456
0075	0734	34028		2663	14804	0111	00042	1432
0100	0853	34319		2668	14857	0146	00074	1389
0125	0917	3464 F		2683	14889	0179	00112	1252
0150	0934	34892		2700	14903	0209	00154	1100
0175	0895 F	3493 H		2709	14893	0236	00198	1019
*0200	0844 B	3490 B		2715	14878	0261	00246	0963
0225	0832 D	3495 C		2720	14878	0284	00298	0916
0250	0823	34995		2725	14879	0307	00353	0873
0300	0694 B	3488 B		2735	14836	0349	00470	0782
0400	0572 B	3487 B		2751	14804	0421	00725	0642
0500	0515	34938		2763	14798	0480	00997	0532
0600	0463	34945		2770	14793	0531	01283	0475

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0427	34921		2772	14795	0578	01599	0461
0800	0406	34917		2773	14802	0624	01954	0450
1000	0392	34928		2776	14830	0714	02790	0442
1200	0384	34939		2778	14860	0804	03806	0443
1500	0368	34942		2779	14904	0940	05692	0447
2000	0348	34961		2783	14980	1166	09789	0446
2500	0318	34956		2785	15053	1393	15059	0444

C-REF-NO 356 YR 1962 DEPTH 4389 WAVES 1 32X4 AIR T 04.0 VIS
 CONS. NO 019 MONTH 3 MXSAMPD 23 WAVES 2 3682 WET B 02.3 STN 019
 LAT 42-000N DAY 10 NO.DPTH 18 WND-DIR 050 WW-CODE
 LON 56-300W HR 10.2 W-COLOR WND-SPD 10 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1011. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
102	0000	0525	33555		2652	14701
102	0008	0571	33550		2647	14721
102	0028	0571	33543		2646	14724
102	0073	0640	33769		2655	14763
102	0098	0651	33794	708	2656	14771
102	0148	0751	34521	538	2699	14828
102	0198	0809	34852	463	2716	14863
102	0250	0754	34851		2725	14851
102	0306	0659	34799	463	2734	14822
102	0410	0562	34868	497	2752	14801
102	0490	0483	34844	571	2759	14782
102	0584	0494	34974		2768	14804
102	0647	0457	34947	604	2770	14798
102	0852	0430	34966	612	2775	14821
102	1038	0411	34968	637	2777	14845
102	1316	0387	34957	662	2779	14881
102	1788	0361	34951	662	2781	14949
102	2332	0328	34956	662	2785	15028

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0525	33555		2652	14701	0000	00000	1518
0010	0574 B	33548		2646	14723	0016	00001	1580
0020	0580 D	33541		2645	14727	0032	00003	1593
0030	0574	33552		2646	14726	0048	00007	1579
0050	0603 C	3365 F		2650	14742	0079	00020	1545
0075	0641	33768		2655	14763	0117	00045	1504
0100	0654	3382 B		2657	14773	0155	00079	1487
0125	0701 C	3416 I		2677	14800	0190	00119	1301
0150	0755	34541		2700	14830	0220	00161	1092
0175	0792 B	34745		2711	14851	0247	00205	0998
0200	0808	34856		2717	14863	0271	00252	0944
0225	0790 B	3488 C		2721	14861	0294	00303	0906
0250	0754	34851		2725	14851	0317	00358	0878
0300	0669	34804		2733	14825	0359	00477	0803
0400	0569	3486 B		2750	14802	0433	00736	0646
0500	0483 B	3486 B		2760	14784	0493	01014	0553
0600	0486	34971		2769	14803	0545	01308	0484
0700	0443 B	3495 B		2772	14801	0593	01627	0462

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0430 B	3495 B		2774	14813	0639	01983	0450
1000	0415	34968		2777	14840	0730	02817	0441
1200	0396	34962		2778	14866	0819	03831	0442
1500	0376	34953		2780	14907	0954	05718	0449
2000	0345	34950		2782	14979	1183	09844	0450

C-REF-NO 356 YR 1962 DEPTH 4755 WAVES 1 27X4 AIR T 06.8 VIS
 CONS. NO 020 MONTH 3 MXSAMPD 24 WAVES 2 2782 WET B 04.1 STN 020
 LAT 41-290N DAY 10 NO.DPTH 19 WND-DIR 300 WW-CODE
 LON 56-020W HR 16.0 W-COLOR WND-SPD 10 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1010. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
160	0000	1210	35860		2726	14989
160	0008	1443	35860		2678	15068
160	0028	1444	35854		2677	15071
160	0077	1436	35844		2678	15077
160	0107	1431	35835	554	2678	15080
160	0160	1335	35599	571	2680	15054
160	0215	1289	35477	554	2680	15046
160	0270	1282	35590		2690	15054
160	0326	1102	35389	348	2709	14999
160	0441	0725	34927	430	2735	14872
160	0488	0670	34929	439	2742	14858
160	0565	0591	34965	488	2756	14840
160	0569	0562	34927		2756	14828
160	0649	0497	34922	554	2764	14815
160	0811	0463	34975	612	2772	14828
160	0994	0428	34959	637	2775	14844
160	1270	0392	34950	645	2778	14875
160	1777	0368	34959	654	2781	14951
160	2357	0339	34961	654	2784	15037

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1210	35860		2726	14989	0000	00000	0825
0010	1462 F	35860		2674	15074	0011	00001	1321
0020	1494 I	35857		2666	15086	0024	00003	1392
0030	1444	35854		2677	15071	0038	00006	1294
0050	1441	35849		2677	15074	0064	00017	1298
*0075	1436	35844		2678	15076	0097	00038	1299
0100	1434	35841		2678	15080	0130	00067	1303
0125	1402 C	3576 D		2679	15072	0162	00105	1302
0150	1355 B	3565 C		2680	15060	0195	00152	1299
0175	1318	35548		2680	15050	0228	00206	1306
0200	1297	35492		2680	15047	0261	00270	1313
0225	1293 C	3550 C		2681	15049	0294	00342	1305
0250	1292 D	3555 E		2686	15054	0327	00421	1273
0300	1197 D	3550 C		2700	15029	0387	00592	1140
0400	0840 G	3506 G		2728	14911	0489	00952	0880
0500	0655	34934		2745	14854	0570	01321	0717
0600	0542 D	3494 C		2760	14826	0635	01687	0576

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0479 B	3494 B		2767	14816	0690	02054	0512
0800	0463	34971		2772	14827	0740	02439	0478
1000	0427	34959		2775	14845	0836	03321	0463
1200	0399	34951		2777	14867	0929	04373	0454
1500	0378	34952		2779	14908	1067	06290	0452
2000	0348 C	34954		2782	14980	1296	10433	0452

C-REF-NO 356 YR 1962 DEPTH 5100 WAVES 1 32X4 AIR T 08.3 VIS
 CONS. NO 021 MONTH 3 MXSAMPD 33 WAVES 2 3282 WET B 06.0 STN 021
 LAT 41-005N DAY 10 NO.DPTH 19 WND-DIR 300 WW-CODE
 LON 55-300W HR 21.3 W-COLOR WND-SPD 10 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1009. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
213	0000	1348	35770		2691	15034
213	0012	1443	35774		2671	15067
213	0037	1443	35777		2671	15071
213	0094	1444	35795		2672	15081
213	0122	1445	35778	579	2671	15086
213	0184	1437	35759	563	2671	15093
213	0246	1429	35751	538	2672	15101
213	0308	1257	35575		2694	15052
213	0375	1072	35338	331	2711	14996
213	0500	0814	35103	381	2735	14918
213	0628	0642	35070	480	2757	14872
213	0758	0521	35001	629	2767	14844
213	0867	0475	34989		2772	14843
213	1005	0443	34984	612	2775	14853
213	1272	0399	34947	645	2777	14878
213	1542	0381	34955	637	2779	14916
213	2410	0333		588		
213	2608	0319	34956	645	2785	15072
213	3285	0261	34927	645	2788	15164

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1348	35770		2691	15034	0000	00000	1154
0010	1405 H	35772		2679	15055	0012	00001	1268
0020	1458 E	35775		2668	15073	0026	00003	1376
0030	1456 E	35776		2668	15075	0039	00006	1376
0050	1443	35784		2672	15074	0067	00018	1350
0075	1444	35792		2672	15078	0101	00039	1352
0100	1444	35792		2672	15082	0135	00070	1361
0125	1445	35777		2671	15086	0170	00110	1381
0150	1442	35767		2671	15090	0204	00159	1390
*0175	1439	35761		2671	15092	0240	00218	1394
0200	1443 C	3576 B		2670	15098	0275	00286	1408
0225	1441 C	3576 B		2671	15101	0310	00363	1413
0250	1420	35743		2674	15099	0346	00450	1392
0300	1284 B	35604		2691	15060	0412	00636	1233
0400	1012	35272		2716	14977	0525	01035	1003
0500	0814	35103		2735	14918	0617	01458	0825
0600	0673	3507 B		2753	14880	0692	01877	0659

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0567	35030		2764	14853	0753	02285	0556
0800	0499	34993		2769	14842	0807	02699	0507
1000	0444	34984		2775	14852	0906	03607	0466
1200	0408	34957		2776	14871	1000	04671	0461
1500	0383	34952		2779	14910	1140	06617	0459
2000	0356 B	34962		2782	14984	1372	10816	0457
2500	0327	34958		2785	15057	1605	16216	0456
3000	0287	34941		2787	15126	1833	22713	0441

C-REF-NO 356 YR 1962 DEPTH 5300 WAVES 1 32X4 AIR T 07.0 VIS
 CONS. NO 022 MONTH 3 MXSAMPD 27 WAVES 2 3282 WET B 05.0 STN 022
 LAT 40-310N DAY 11 NO.DPTH 21 WND-DIR 320 WW-CODE
 LON 55-000W HR 02.8 W-COLOR WND-SPD 05 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1009. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
028	0000	1730	36450		2657	15162
028	0009	1745	36447		2653	15168
028	0033	1745	36448		2653	15172
028	0080	1746	36448		2653	15180
028	0108	1745	36450	612	2653	15184
028	0160	1745	36435	535	2652	15192
028	0217	1747	36439	530	2652	15202
028	0268	1750	36444		2652	15212
028	0325	1710	36378	521	2656	15209
028	0433	1486	35962	430	2676	15152
028	0540	1149	35453	372	2706	15051
028	0592	0986	35257	348	2720	14999
028	0688	0798	35082		2736	14943
028	0780	0637	35041	472	2756	14895
028	0968	0512	35040	561	2771	14876
028	1167	0457				
028	1462	0398	34976	654	2779	14910
028	1666	0382	34967		2780	14938
028	1980	0364	34961	645	2781	14983
028	2320	0343	34961		2783	15032
028	2680	0316	34952	654	2785	15083

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1730	36450		2657	15162	0000	00000	1473
0010	1746	36447		2653	15168	0015	00001	1515
0020	1749 B	36447		2652	15171	0030	00003	1526
*0030	1747	36448		2653	15172	0046	00007	1524
0050	1745	36448		2653	15175	0076	00020	1528
0075	1746	36448		2653	15179	0115	00044	1538
0100	1745	36450		2653	15183	0154	00079	1543
0125	1745	36445		2653	15187	0193	00124	1554
0150	1745	36438		2653	15191	0232	00180	1568
0175	1745	36435		2652	15195	0272	00246	1580
0200	1746	36437		2652	15199	0312	00323	1589
0225	1749	36442		2652	15204	0352	00411	1600
0250	1751	36446		2652	15209	0392	00510	1611
0300	1734	36418		2654	15212	0474	00739	1607
0400	1571 B	3612 C		2669	15175	0630	01297	1489

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	1282 B	3564 C		2694	15093	0768	01932	1256
0600	0967	35235		2721	14994	0882	02568	0996
0700	0775	35072		2739	14936	0974	03178	0823
0800	0616 B	35039		2758	14889	1047	03739	0630
1000	0500	35036		2773	14876	1162	04785	0500
1200	0449	3501 B		2776	14888	1260	05898	0472
1500	0394	34974		2779	14915	1402	07863	0458
2000	0363	34961		2781	14986	1637	12111	0467
2500	0330	34955		2784	15058	1873	17604	0462

C-REF-NO 356 YR 1962 DEPTH 5121 WAVES 1 36X4 AIR T 08.0 VIS
 CONS. NO 023 MONTH 3 MXSAMPD 03 WAVES 2 3682 WET B 05.1 STN 023
 LAT 40-000N DAY 11 NO.DPTH 9 WND-DIR 010 WW-CODE
 LON 54-300W HR 08.7 W-COLOR WND-SPD 04 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1008. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
087	0000	1640	36475		2681	15135
087	0010	1815	36479		2638	15189
087	0030	1816	36479		2638	15192
087	0074	1815	36487		2639	15199
087	0099	1813	36473	526	2638	15203
087	0149	1811	36473	530	2639	15210
087	0199	1808	36468	513	2639	15218
087	0248	1783	36458		2645	15218
087	0298	1756	36417	480	2648	15218

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1640	36475		2681	15135	0000	00000	1251
0010	1815	36479		2638	15189	0015	00001	1655
0020	1845 I	36480		2631	15199	0032	00003	1728
0030	1816	36479		2638	15192	0049	00008	1664
0050	1816	36485		2639	15196	0082	00022	1667
0075	1815	36486		2639	15199	0124	00049	1672
0100	1813	36473		2638	15203	0167	00087	1686
0125	1812	36471		2639	15207	0209	00136	1693
0150	1811	36473		2639	15210	0252	00196	1699
0175	1811	36471		2639	15214	0295	00268	1709
0200	1808	36468		2639	15218	0338	00351	1712
0225	1796	36465		2642	15218	0381	00444	1695
0250	1785	36453		2644	15219	0423	00548	1687
0300	1755	36415		2648	15218	0508	00786	1659

C-REF-NO 356	YR 1962	DEPTH 5600	WAVES 1 36X4	AIR T 08.3	VIS
CONS. NO 024	MONTH 3	MXSAMPD 10	WAVES 2 3682	WET B 04.8	STN 024
LAT 40-000N	DAY 11	NO.DPTH 16	WND-DIR 350	WW-CODE	
LON 57-020W	HR 20.7	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1014.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
207	0000	1585	36030		2659	15113
207	0005	1584	36025		2659	15114
207	0019	1583	36025		2659	15116
207	0056	1523	35895		2663	15101
207	0076	1467	35821	579	2669	15086
207	0117	1421	35750	563	2674	15077
207	0163	1384	35721	563	2680	15072
207	0205	1372	35698		2680	15075
207	0252	1330	35643	463	2685	15068
207	0361	1157	35492	389	2707	15025
207	0456	0956	35226	331	2722	14966
207	0483	0935	35221	356	2725	14962
207	0535	0834	35133		2735	14932
207	0615	0702	35069	430	2749	14893
207	0760	0542	35007	538	2765	14853
207	0955	0472	35010	579	2774	14857

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1585	36030		2659	15113	0000	00000	1454
0010	1584	36025		2659	15114	0015	00001	1459
0020	1582	36023		2659	15115	0029	00003	1460
0030	1572	3600 B		2659	15114	0044	00007	1461
*0050	1537	35923		2662	15105	0073	00019	1446
0075	1470	35824		2669	15087	0109	00042	1382
0100	1434 B	35770		2673	15079	0143	00072	1355
0125	1413	35743		2675	15076	0177	00112	1340
0150	1392	35726		2678	15073	0211	00159	1317
0175	1381	35716		2680	15073	0244	00214	1309
0200	1374	35701		2680	15075	0277	00278	1312
0225	1357	35677		2682	15073	0310	00350	1304
0250	1332	35646		2684	15069	0343	00429	1284
0300	1264	3559 B		2694	15053	0405	00606	1206
0400	1065 E	3537 E		2714	14998	0518	01007	1026
0500	0906 B	3520 B		2728	14954	0615	01454	0902
0600	0724	35077		2747	14900	0698	01914	0727
0700	0596	35025		2760	14865	0765	02359	0599
0800	0512	34997		2768	14847	0821	02795	0521

C-REF-NO 356	YR 1962	DEPTH 5200	WAVES 1 36X4	AIR T 08.8	VIS
CONS. NO 025	MONTH 3	MXSAMPD 09	WAVES 2 3626	WET B 06.5	STN 025
LAT 40-080N	DAY 12	NO.DPTH 16	WND-DIR 330	WW-CODE	
LON 57-310W	HR 07.8	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1017.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
078	0000	1970	36510		2601	15231
078	0007	1979	36507		2598	15234
078	0024	1982	36505		2597	15238
078	0061	1982	36506		2598	15244
078	0082	1982	36507	530	2598	15248
078	0125	1944	36566	455	2612	15245
078	0166	1839	36499	463	2634	15221
078	0210	1818	36496		2639	15223
078	0258	1785	36470	505	2645	15221
078	0355	1690	36295	480	2655	15206
078	0441	1556	36096	463	2671	15177
078	0462	1544	36049	472	2670	15177
078	0504	1429	35850		2680	15144
078	0565	1186	35525	364	2704	15069
078	0692	0844	35133	372	2733	14962
078	0851	0606	35026	513	2759	14894

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1970	36510		2601	15231	0000	00000	2006
0010	1981	36506		2598	15235	0020	00001	2039
0020	1983	36505		2597	15238	0041	00004	2049
0030	1982	36505		2597	15239	0062	00010	2052
0050	1982	36505		2597	15242	0103	00027	2059
0075	1983	36506		2597	15247	0155	00060	2069
0100	1974	3654 B		2602	15249	0207	00106	2034
0125	1944	36566		2612	15245	0257	00164	1947
0150	1879 C	3653 B		2626	15230	0304	00231	1823
0175	1831 B	36496		2636	15221	0349	00305	1739
0200	1819 B	36494		2639	15221	0393	00389	1720
0225	1809	36491		2641	15222	0436	00483	1706
0250	1791	36477		2644	15221	0478	00587	1684
0300	1750	36408		2649	15216	0563	00825	1653
0400	1614 D	36193		2665	15190	0723	01398	1529
0500	1443	35872		2679	15149	0872	02083	1419
0600	1074 B	35384		2714	15034	0998	02786	1075
0700	0812 E	3510 C		2735	14950	1096	03435	0862
0800	0649 C	3500 B		2751	14902	1175	04042	0705

C-REF-NO 356	YR 1962	DEPTH 5121	WAVES 1 32X4	AIR T 08.8	VIS
CONS. NO 026	MONTH 3	MXSAMPD 11	WAVES 2 3282	WET B 06.5	STN 026
LAT 40-265N	DAY 12	NO.DPTH 16	WND-DIR 330	WW-CODE	
LON 58-020W	HR 13.2	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1017.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
132	0000	1680	36505		2673	15148
132	0011	1844	36502		2633	15197
132	0028	1846	36504		2633	15201
132	0077	1846	36506		2633	15209
132	0106	1847	36511	530	2633	15214
132	0155	1847	36499	543	2632	15222
132	0210	1847	36500	538	2632	15231
132	0264	1823	36486		2637	15233
132	0320	1779	36460	488	2646	15229
132	0433	1676	36300	488	2659	15215
132	0511	1486	35963	430	2676	15165
132	0550	1368	35761	405	2686	15131
132	0593	1246	35600		2698	15095
132	0680	0982	35254	348	2720	15012
132	0868	0653	35087	563	2757	14916
132	1065	0523	35057	563	2771	14896

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1680	36505		2673	15148	0000	00000	1319
0010	1792 I	36503		2646	15182	0015	00001	1583
0020	1864 F	36503		2628	15205	0031	00003	1759
0030	1846	36504		2633	15201	0049	00008	1718
0050	1846	36505		2632	15204	0084	00022	1725
*0075	1846	36506		2633	15208	0127	00050	1732
0100	1847	36510		2633	15213	0171	00089	1740
0125	1847	36507		2632	15217	0215	00140	1752
0150	1847	36501		2632	15221	0259	00203	1765
0175	1848	36499		2632	15226	0304	00277	1778
0200	1848	36500		2632	15229	0349	00364	1786
0225	1842	36497		2633	15232	0394	00462	1783
0250	1831	36491		2635	15233	0438	00571	1769
0300	1796	36472		2643	15231	0526	00819	1716
0400	1718 C	3637 B		2654	15223	0695	01424	1635
0500	1518	36019		2674	15174	0852	02145	1472
0600	1224	35570		2700	15089	0988	02907	1221
0700	0934	3521 C		2725	14998	1099	03642	0977
0800	0741 C	3509 F		2745	14940	1187	04319	0773
1000	0529 C	3499 H		2765	14887	1324	05563	0575

C-REF-NO 356	YR 1962	DEPTH 5075	WAVES 1 31X4	AIR T 09.0	VIS
CONS. NO 027	MONTH 3	MXSAMPD 11	WAVES 2 3182	WET B 07.5	STN 027
LAT 40-565N	DAY 12	NO.DPTH 16	WND-DIR 340	WW-CODE	
LON 58-120W	HR 19.3	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1016.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
193	0000	1825	36335		2625	15188
193	0008	1864	36335		2615	15201
193	0025	1864	36333		2615	15203
193	0068	1854	36298		2615	15207
193	0092	1652				
193	0140	1632	36116		2655	15151
193	0188	1542	35925		2661	15129
193	0236	1424	35642		2665	15096
193	0285	1438	35717		2668	15110
193	0386	1325	35688		2689	15089
193	0485	1071	35395		2715	15014
193	0505	1012	35312		2719	14995
193	0590	0849	35145		2733	14947
193	0677	0686	35056		2750	14897
193	0862	0513	35011		2769	14858
193	1070	0446	34996		2775	14865

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1825	36335		2625	15188	0000	00000	1779
0010	1867	36335		2614	15202	0018	00001	1884
0020	1870 B	36334		2613	15204	0037	00004	1895
0030	1875 D	36331		2612	15207	0057	00009	1912
0050	1887 I	36319		2608	15214	0096	00025	1957
0075	1796 E	36286		2628	15191	0143	00055	1772
0100	1633 G	36234		2664	15147	0183	00091	1445
0125	1615 I	36165		2663	15144	0220	00133	1461
0150	1617	36082		2656	15148	0257	00186	1536
0175	1571	35984		2659	15137	0296	00250	1514
0200	1508 C	3584 D		2662	15119	0334	00323	1488
0225	1447 B	3570 C		2664	15102	0371	00404	1473
0250	1423 C	3565 D		2666	15098	0408	00495	1467
0300	1432	35729		2670	15110	0481	00702	1440
0400	1295	35660		2693	15081	0617	01183	1241
0500	1027	35332		2718	15000	0730	01701	1006
0600	0829	35132		2735	14941	0824	02226	0846
0700	0655 B	35044		2754	14889	0900	02732	0667
0800	0552 C	3501 B		2764	14864	0962	03209	0561
1000	0440 D	3498 B		2775	14850	1066	04160	0464

C-REF-NO 356	YR 1962	DEPTH 5100	WAVES 1 36X3	AIR T 04.0	VIS
CONS. NO 028	MONTH 3	MXSAMPD 05	WAVES 2 3682	WET B 02.1	STN 028
LAT 41-170N	DAY 12	NO.DPTH 11	WND-DIR 330	WW-CODE	
LON 58-170W	HR 23.5	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1011.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
235	0000	1550	35890		2656	15101
235	0013	1507	35893		2666	15089
235	0034	1508	35881		2665	15093
235	0073	1478	35830		2668	15089
235	0095	1393	35676		2674	15063
235	0147	1235	35338		2680	15015
235	0190	1246	35379		2681	15026
235	0237	1273	35460		2682	15044
235	0282	1272	35462		2682	15051
235	0375	1105	35383		2708	15008
235	0477	0838	35091		2731	14923

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1550	35890		2656	15101	0000	00000	1481
0010	1526 C	35892		2662	15095	0015	00001	1431
0020	1503 B	35891		2667	15089	0029	00003	1387
0030	1505 B	35885		2666	15091	0043	00007	1398
0050	1508 B	3588 C		2665	15095	0071	00018	1414
0075	1471	35818		2668	15087	0107	00041	1390
0100	1372	3563 B		2675	15057	0141	00071	1331
0125	1287 C	3545 D		2679	15030	0174	00110	1302
0150	1233	35336		2680	15015	0207	00156	1293
0175	1234 B	3535 C		2681	15019	0239	00210	1293
0200	1252	35398		2681	15030	0272	00273	1296
0225	1267	35441		2682	15040	0305	00345	1299
0250	1277	35466		2682	15048	0337	00425	1307
0300	1251 B	35458		2686	15047	0403	00609	1277
0400	1072 G	3532 B		2709	14999	0521	01029	1071

C-REF-NO 356 YR 1962 DEPTH 4600 WAVES 1 36X3 AIR T 04.5 VIS
 CONS. NO 029 MONTH 3 MXSAMPD 13 WAVES 2 3626 WET B 02.3 STN 029
 LAT 41-300N DAY 13 NO.DPTH 16 WND-DIR 350 WW-CODE
 LON 58-302W HR 03.5 W-COLOR WND-SPD 04 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1015. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
035	0000	0740	34075		2666	14794
035	0010	0737	34085		2667	14795
035	0029	0737	34083		2667	14798
035	0074	1085	34986		2681	14946
035	0098	1123	35074	637	2681	14965
035	0148	1241	35370	588	2681	15018
035	0197	1248	35415	588	2684	15029
035	0246	1272	35493		2685	15046
035	0296	1110	35315	372	2702	14996
035	0395	0889	35127	381	2725	14929
035	0495	0627	34936	480	2749	14842
035	0605	0498	34879	554	2760	14807
035	0729	0476	34944		2768	14820
035	0854	0445	34952	671	2772	14828
035	1105	0407	34945	654	2776	14854
035	1348	0400	34968	645	2778	14892

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0740	34075		2666	14794	0000	00000	1393
0010	0737	34085		2667	14795	0014	00001	1383
0020	0731 B	3407 C		2667	14794	0028	00003	1387
0030	0744 B	3410 B		2667	14801	0042	00006	1384
0050	0891 I	3449 I		2675	14865	0069	00018	1315
0075	1087	34992		2681	14948	0102	00038	1264
0100	1128	35087		2681	14967	0133	00067	1271
0125	1190 D	3524 D		2681	14995	0166	00104	1277
0150	1242	35374		2682	15018	0198	00150	1281
0175	1250 C	3541 C		2683	15026	0230	00203	1279
0200	1252	35423		2683	15031	0262	00266	1277
0225	1272 D	3547 C		2683	15042	0295	00336	1285
0250	1262 B	35483		2686	15043	0327	00414	1266
0300	1100	35305		2703	14993	0387	00583	1109
0400	0875	35116		2727	14925	0488	00940	0891
0500	0618	34930		2750	14839	0566	01299	0670
0600	0501	34879		2760	14808	0629	01651	0571
0700	0476 B	3493 B		2767	14815	0684	02018	0517
0800	0458	34953		2771	14825	0735	02408	0486
1000	0419	34948		2775	14841	0831	03294	0461

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
1200	0401	34959		2777	14867	0923	04339	0449

C-REF-NO 356	YR 1962	DEPTH 4775	WAVES 1 36X2	AIR T 03.6	VIS
CONS. NO 030	MONTH 3	MXSAMPD 13	WAVES 2 3682	WET B 02.3	STN 030
LAT 42-000N	DAY 13	NO.DPTH 16	WND-DIR 090	WW-CODE	
LON 59-000W	HR 08.3	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 1009.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
083	0000	1220	35545		2699	14988
083	0010	1274	35549		2689	15009
083	0030	1274	35545		2689	15012
083	0075	1274	35543		2688	15019
083	0099	1278	35549	571	2688	15024
083	0149	1280	35558	571	2688	15033
083	0198	1270	35557	554	2690	15038
083	0248	1270	35559		2690	15046
083	0298	1094	35355	356	2708	14991
083	0397	0804	35045	397	2732	14897
083	0495	0615	34957	480	2752	14838
083	0669	0498	34976	571	2768	14819
083	0783	0450	34955		2772	14818
083	0892	0434	34965	629	2774	14830
083	1009	0404	34950	654	2776	14837
083	1338	0385	34945	654	2778	14884

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1220	35545		2699	14988	0000	00000	1075
0010	1274	35549		2689	15009	0011	00001	1176
0020	1283 C	35548		2687	15013	0023	00002	1196
0030	1274	35545		2689	15012	0035	00006	1184
0050	1273	35542		2688	15015	0059	00015	1190
0075	1274	35543		2688	15019	0089	00035	1198
0100	1278	35549		2688	15025	0120	00062	1208
0125	1280	35555		2688	15030	0150	00097	1215
0150	1280	35558		2688	15034	0181	00141	1218
0175	1275	35558		2689	15036	0211	00192	1216
0200	1272	35559		2690	15039	0242	00251	1215
0225	1280 D	3557 B		2689	15046	0273	00318	1230
0250	1264	35553		2691	15045	0304	00393	1220
0300	1087	35347		2709	14989	0361	00554	1056
0400	0797	35040		2733	14894	0456	00890	0827
0500	0609	34956		2753	14836	0530	01228	0639
0600	0525 E	3496 C		2763	14819	0590	01563	0541
0700	0482	34970		2769	14818	0642	01911	0492
0800	0447	34956		2772	14820	0691	02285	0469
1000	0406	34952		2776	14836	0783	03138	0443

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
1200	0392 B	3495 B		2778	14863	0873	04154	0442

C-REF-NO 356 YR 1962 DEPTH 4279 WAVES 1 09X1 AIR T 02.8 VIS
 CONS. NO 031 MONTH 3 MXSAMPD 13 WAVES 2 0942 WET B 01.5 STN 031
 LAT 42-240N DAY 13 NO.DPTH 16 WND-DIR 110 WW-CODE
 LON 59-250W HR 12.2 W-COLOR WND-SPD 05 CLD-TPE
 MARSD SQ 150 C/I 1801 W-TRNSP BARO 1003. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
122	0000	0223	32630		2608	14560
122	0007	0237	32652		2609	14568
122	0023	0243	32682		2611	14574
122	0064	0431	33249		2639	14669
122	0087	0665	33978	604	2668	14778
122	0131	1136	35242	455	2692	14977
122	0176	0949	34950	455	2702	14913
122	0223	0627	34517		2716	14792
122	0273	0726	34884	455	2731	14844
122	0384	0622	34980	497	2753	14823
122	0507	0507	34948	554	2765	14796
122	0669	0454	34962	612	2772	14801
122	0775	0432	34959		2774	14809
122	0876	0414	34945	645	2775	14819
122	1070	0393	34941	662	2777	14842
122	1295	0382	34943	662	2778	14875

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0223	32630		2608	14560	0000	00000	1939
0010	0238	32655		2609	14569	0019	00001	1931
0020	0242	32673		2610	14572	0039	00004	1920
0030	0256	3272 B		2613	14581	0058	00009	1896
0050	0336	3296 B		2625	14622	0095	00024	1780
0075	0537 B	3358 D		2653	14719	0137	00050	1519
0100	0836 I	3444 I		2680	14852	0172	00081	1275
0125	1090 G	3512 G		2691	14958	0203	00117	1186
0150	1106 I	3522 I		2696	14969	0232	00158	1143
0175	0957	3497 B		2702	14917	0260	00205	1088
0200	0768 I	3469 I		2710	14846	0287	00256	1008
0225	0627 B	3453 B		2716	14792	0311	00310	0944
0250	0658 I	3468 I		2724	14811	0334	00365	0876
0300	0721 G	3496 G		2738	14848	0376	00481	0760
0400	0605	34979		2755	14818	0444	00725	0603
0500	0513	34951		2764	14797	0501	00985	0519
0600	0468 B	34954		2770	14795	0551	01268	0475
0700	0447	34962		2773	14803	0598	01582	0454
0800	0427	34956		2774	14812	0644	01933	0446
1000	0399	34940		2776	14833	0734	02766	0442

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
1200	0384	34938		2778	14860	0824	03783	0444

C-REF-NO 356	YR 1962	DEPTH 3600	WAVES 1 09X2	AIR T 01.8	VIS
CONS. NO 032	MONTH 3	MXSAMPD 12	WAVES 2 0942	WET B 01.7	STN 032
LAT 42-390N	DAY 13	NO.DPTH 16	WND-DIR 100	WW-CODE	
LON 59-405W	HR 15.1	W-COLOR	WND-SPD 13	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 995.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
151	0000	0295	32790		2615	14594
151	0007	0278	32798		2617	14588
151	0023	0283	32797		2617	14593
151	0069	0300	32888		2622	14609
151	0093	0355	33142	736	2638	14640
151	0143	0571	34196	571	2698	14752
151	0193	0703	34602	588	2712	14818
151	0248	0746	34753		2718	14846
151	0300	0609	34802	480	2741	14801
151	0409	0508	34873	546	2759	14779
151	0528	0474	34939	596	2768	14786
151	0571	0467	34941	596	2769	14790
151	0671	0443	34949		2772	14797
151	0780	0421	34945	630	2774	14805
151	1010	0394	34943	662	2777	14832
151	1247	0375	34942	662	2779	14864

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0295	32790		2615	14594	0000	00000	1873
0010	0277	32798		2617	14588	0019	00001	1852
0020	0280	32798		2617	14591	0037	00004	1856
0030	0282 B	3279 B		2616	14593	0056	00009	1864
0050	0286 B	3281 D		2617	14598	0094	00024	1852
0075	0311	32937		2625	14615	0139	00053	1779
0100	0384 B	3329 G		2646	14655	0182	00091	1582
0125	0490 D	3381 I		2677	14711	0218	00132	1300
0150	0595	3428 B		2701	14764	0248	00174	1075
0175	0665	3451 D		2710	14799	0274	00218	0999
0200	0717	34633		2713	14825	0299	00266	0979
0225	0746 B	3472 B		2715	14842	0323	00319	0963
0250	0742	34756		2719	14845	0347	00377	0931
0300	0609	34802		2741	14801	0389	00494	0725
0400	0510 B	34868		2758	14778	0454	00724	0566
0500	0477	34928		2767	14782	0508	00970	0494
0600	0460	34944		2770	14792	0557	01246	0473
0700	0437	34948		2773	14799	0603	01559	0452
0800	0418	34945		2774	14808	0649	01908	0443
1000	0395	34943		2777	14831	0738	02731	0435

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
1200	0377	34942		2779	14857	0826	03727	0433

C-REF-NO 356	YR 1962	DEPTH 2377	WAVES 1 09X3	AIR T 03.1	VIS
CONS. NO 033	MONTH 3	MXSAMPD 12	WAVES 2 0982	WET B 03.1	STN 033
LAT 42-550N	DAY 13	NO.DPTH 16	WND-DIR 100	WW-CODE	
LON 59-574W	HR 18.3	W-COLOR	WND-SPD 13	CLD-TPE	
MARSD SQ 150	C/I 1801	W-TRNSP	BARO 987.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
183	0000	0280	32750		2613	14587
183	0008	0273	32776		2616	14585
183	0025	0275	32782		2616	14589
183	0074	0382	33109		2632	14648
183	0100	0417	33716	621	2677	14675
183	0152	0618	34443	530	2711	14776
183	0206	0503	34667	505	2743	14741
183	0265	0588	34838		2746	14787
183	0320	0539	34809	523	2750	14776
183	0434	0527	34928	543	2761	14792
183	0560	0470	34958	604	2770	14790
183	0564	0453	34944	596	2771	14783
183	0661	0445	34953		2772	14796
183	0761	0434	34971	637	2775	14808
183	0983	0404	34952	654	2777	14832
183	1205	0384	34946	687	2778	14861

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0280	32750		2613	14587	0000	00000	1891
0010	0272	32777		2616	14585	0019	00001	1865
0020	0272	32781		2616	14587	0038	00004	1863
0030	0284 B	3278 C		2615	14594	0056	00009	1872
0050	0324 D	3285 F		2618	14615	0094	00024	1852
0075	0383	33131		2634	14649	0139	00052	1698
0100	0417	33716		2677	14675	0176	00086	1293
0125	0522 I	3414 B		2699	14728	0206	00120	1092
0150	0611 B	34426		2711	14772	0233	00157	0987
0175	0578 I	3458 E		2727	14765	0256	00195	0838
0200	0519 D	3466 B		2740	14746	0275	00232	0710
0225	0526 G	34738		2746	14754	0292	00270	0661
0250	0563 F	34808		2747	14774	0309	00311	0656
0300	0562 C	3483 B		2748	14783	0342	00403	0648
0400	0526 C	3488 C		2757	14785	0404	00623	0573
0500	0487 B	34943		2767	14786	0457	00871	0495
0600	0452 B	34953		2771	14789	0505	01141	0456
0700	0441	34960		2773	14801	0551	01447	0448
0800	0429	34970		2775	14812	0596	01792	0437
1000	0405	3497 B		2778	14836	0684	02606	0431

DEPTH	T E M P	S A L	OXYGEN	SGMT	SDUND	DELTA-D	POT.EN	SVA
1200	0384	34947		2778	14860	0772	03604	0438

C-REF-NO 356	YR 1962	DEPTH 1481	WAVES 1 09X3	AIR T 03.1	VIS
CONS. NO 034	MONTH 3	MXSAMPD 13	WAVES 2 0982	WET B 03.1	STN 034
LAT 43-115N	DAY 13	NO.DPTH 16	WND-DIR 060	WW-CODE	
LON 60-142W	HR 21.7	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 988.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
217	0000	0125	32510		2605	14515
217	0009	0154	32545		2606	14530
217	0032	0167	32627		2612	14541
217	0083	0329	33007		2629	14625
217	0110	0357	33168	753	2639	14644
217	0166	0822	34677	513	2701	14861
217	0227	0763	34760	472	2716	14849
217	0282	0678	34812		2732	14826
217	0338	0640	34890	463	2743	14821
217	0457	0504	34848	563	2757	14785
217	0573	0459	34915	596	2768	14787
217	0627	0441	34935	621	2771	14788
217	0737	0429	34945		2773	14802
217	0846	0419	34943	645	2774	14816
217	1082	0394	34933	660	2776	14844
217	1318	0388	34956	662	2779	14882

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0125	32510		2605	14515	0000	00000	1965
0010	0155	32548		2606	14531	0020	00001	1955
0020	0163 C	32581		2609	14537	0039	00004	1935
*0030	0167	32619		2611	14540	0059	00009	1909
0050	0222 F	3275 D		2618	14570	0096	00024	1847
0075	0302 D	3294 B		2626	14611	0142	00053	1768
0100	0342 C	3309 D		2635	14634	0186	00093	1693
0125	0479 I	3356 I		2658	14703	0225	00138	1476
0150	0686 I	3424 I		2686	14800	0260	00186	1226
0175	0833 F	3474 H		2704	14867	0288	00234	1061
0200	0828 I	3483 I		2711	14870	0314	00284	0995
*0225	0770 B	3477 B		2716	14852	0339	00337	0956
0250	0726 B	34782		2723	14839	0362	00394	0890
0300	0664	34839		2736	14824	0404	00511	0770
0400	0568 D	3488 D		2752	14802	0475	00762	0630
0500	0482 B	3487 B		2761	14783	0534	01034	0543
0600	0449	34926		2770	14787	0585	01323	0473
0700	0431	34945		2773	14796	0632	01633	0448
0800	0423	34945		2774	14810	0677	01984	0449
1000	0402	34935		2775	14834	0768	02827	0450

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
1200	0392	34945		2777	14863	0859	03857	0448

C-REF-NO 356	YR 1962	DEPTH 82	WAVES 1 09X3	AIR T 01.3	VIS
CONS. NO 035	MONTH 3	MXSAMPD 01	WAVES 2 0982	WET B 01.1	STN 035
LAT 43-270N	DAY 14	NO.DPTH 6	WND-DIR 070	WW-CODE	
LON 60-300W	HR 00.8	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 988.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
008	0000	0422	32720		2598	14647
008	0010	0243	32716	841	2613	14572
008	0020	0244	32720	836	2614	14574
008	0029	0247	32726	844	2614	14577
008	0049	0250	32755	844	2616	14582
008	0073	0250	32803	819	2620	14586

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0422	32720		2598	14647	0000	00000	2039
0010	0243	32716		2613	14572	0020	00001	1889
0020	0244	32720		2614	14574	0039	00004	1887
0030	0247	32727		2614	14577	0058	00009	1884
0050	0250	32755		2616	14582	0096	00024	1866
0075	0250	32808		2620	14587	0142	00054	1826

C-REF-NO 356	YR 1962	DEPTH 110	WAVES 1 27X1	AIR T 00.8	VIS
CONS. NO 036	MONTH 3	MXSAMPD 01	WAVES 2 2742	WET B -00.5	STN 036
LAT 44-160N	DAY 17	NO.DPTH 7	WND-DIR 260	WW-CODE	
LON 63-190W	HR 05.0	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1000.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
050	0000	-0110	31020		2496	14386
050	0010	-0109	31043		2498	14389
050	0020	-0113	31048		2498	14389
050	0030	-0123	31186		2510	14387
050	0050	-0086	31415		2527	14411
050	0075	0002	31715		2548	14461
050	0100	0093	31997		2566	14510

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0110	31020		2496	14386	0000	00000	3007
0010	-0109	31043		2498	14389	0030	00002	2989
0020	-0113	31048		2498	14389	0060	00006	2983
0030	-0123	31186		2510	14387	0090	00014	2873
0050	-0086	31415		2527	14411	0146	00037	2705
0075	0002	31715		2548	14461	0211	00078	2506
0100	0093	31997		2566	14510	0272	00133	2336

C-REF-NO 356 YR 1962 DEPTH 255 WAVES 1 27X1 AIR T 01.9 VIS
 CONS. NO 037 MONTH 3 MXSAMPD 03 WAVES 2 2742 WET B 00.7 STN 037
 LAT 43-530N DAY 17 NO.DPTH 10 WND-DIR 260 WW-CODE
 LON 62-530W HR 08.6 W-COLOR WND-SPD 05 CLD-TPE
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 999. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
086	0000	0210	31940		2554	14545
086	0010	0117	31925		2559	14505
086	0020	0141	32039		2567	14519
086	0030	0148	32089		2570	14525
086	0051	0216	32418		2592	14563
086	0076	0320	32840		2617	14618
086	0101	0514	33534		2652	14713
086	0151	0693	34320		2691	14804
086	0202	0707	34480		2702	14820
086	0252	0747	34707		2714	14846

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0210	31940		2554	14545	0000	00000	2453
0010	0117	31925		2559	14505	0024	00001	2406
0020	0141	32039		2567	14519	0048	00005	2333
0030	0148	32089		2570	14525	0072	00011	2299
0050	0212	32399		2590	14560	0116	00029	2107
0075	0315	32820		2616	14615	0166	00061	1870
0100	0506	33506		2651	14709	0209	00099	1545
0125	0628 C	3400 B		2675	14769	0245	00140	1321
0150	0692	34311		2691	14803	0277	00184	1176
0175	0709 D	3443 H		2698	14815	0305	00232	1113
0200	0708	34479		2702	14820	0333	00285	1081
0225	0751 G	3468 I		2712	14843	0359	00342	0995
0250	0748	3471 B		2714	14846	0384	00403	0975

C-REF-NO 356	YR 1962	DEPTH 90	WAVES 1 27X1	AIR T 02.0	VIS
CONS. NO 038	MONTH 3	MXSAMPD 01	WAVES 2 2742	WET B 01.2	STN 038
LAT 43-290N	DAY 17	NO.DPTH 6	WND-DIR 260	WW-CODE	
LON 62-270W	HR 11.6	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARD 998.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
116	0000	0295	32240		2571	14586
116	0010	0148	32259		2584	14524
116	0020	0152	32265		2584	14527
116	0030	0174	32406		2594	14541
116	0050	0249	32642		2607	14580
116	0075	0494	33328		2638	14698

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0295	32240		2571	14586	0000	00000	2289
0010	0148	32259		2584	14524	0022	00001	2170
0020	0152	32265		2584	14527	0044	00004	2168
0030	0174	32406		2594	14541	0066	00010	2075
0050	0249	32642		2607	14580	0106	00026	1950
0075	0494	33328		2638	14698	0152	00055	1662

C-REF-NO 356 YR 1962 DEPTH 100 WAVES 1 27X2 AIR T 03.2 VIS
 CONS. NO 039 MONTH 3 MXSAMPD 01 WAVES 2 2742 WET B 02.4 STN 039
 LAT 43-090N DAY 17 NO.DPTH 7 WND-DIR 260 WW-CODE
 LON 62-050W HR 14.0 W-COLOR WND-SPD 07 CLD-TPE
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 999. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
140	0000	0250	32920		2629	14576
140	0010	0347	32928		2621	14620
140	0020	0351	32949		2623	14623
140	0030	0371	32994		2624	14634
140	0050	0379	33019		2626	14641
140	0075	0423	33128		2630	14665
140	0090	0573	33537		2645	14735

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0250	32920		2629	14576	0000	00000	1739
0010	0347	32928		2621	14620	0018	00001	1814
0020	0351	32949		2623	14623	0036	00004	1802
0030	0371	32994		2624	14634	0054	00008	1787
0050	0379	33019		2626	14641	0090	00023	1777
0075	0423	33128		2630	14665	0134	00051	1739

C-REF-NO 356	YR 1962	DEPTH 1061	WAVES 1 27X2	AIR T 03.1	VIS
CONS. NO 040	MONTH 3	MXSAMPD 10	WAVES 2 2742	WET B 02.5	STN 040
LAT 42-490N	DAY 17	NO.DPTH 15	WND-DIR 260	WW-CODE	
LON 61-580W	HR 16.4	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 998.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
164	0000	0215	32545		2602	14556
164	0010	0215	32547		2602	14557
164	0029	0216	32554		2603	14561
164	0078	0353	33025		2629	14635
164	0102	0605	33764	628	2659	14753
164	0151	1130	35223	432	2691	14978
164	0203	1022	35157	404	2706	14947
164	0254	0861	35000		2720	14894
164	0303	0697	34822	440	2730	14837
164	0407	0551	34852	518	2752	14796
164	0512	0506	34914	546	2762	14796
164	0631	0474	34943	595	2768	14803
164	0739	0443	34949		2772	14808
164	0848	0421	34949	636	2774	14817
164	0957	0408	34944	652	2775	14829

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0215	32545		2602	14556	0000	00000	1998
0010	0215	32547		2602	14557	0020	00001	1996
0020	0214	32544		2602	14558	0040	00004	1997
0030	0215	32553		2603	14561	0060	00009	1992
0050	0232 F	3263 H		2607	14572	0100	00026	1946
*0075	0335 B	3297 B		2626	14626	0147	00055	1777
0100	0582	33696		2657	14743	0188	00092	1489
0125	0888 I	3455 I		2680	14877	0223	00132	1280
0150	1122	3520 B		2691	14975	0254	00175	1189
0175	1126 I	3530 I		2698	14982	0283	00224	1128
0200	1038 C	3519 D		2705	14953	0311	00277	1067
0225	0957	35097		2712	14926	0337	00334	1001
0250	0875	35014		2719	14899	0361	00394	0937
0300	0706	34832		2730	14840	0406	00519	0833
0400	0555	3484 B		2750	14796	0480	00782	0641
0500	0508	34907		2761	14795	0540	01057	0547
0600	0481	34939		2767	14801	0593	01356	0502
0700	0454	34948		2771	14806	0643	01685	0473
0800	0430	34950		2774	14812	0690	02045	0453

C-REF-NO 356	YR 1962	DEPTH 2377	WAVES 1 27X2	AIR T 05.9	VIS
CONS. NO 041	MONTH 3	MXSAMPD 21	WAVES 2 2742	WET B 04.5	STN 041
LAT 42-332N	DAY 17	NO.DPTH 18	WND-DIR 290	WW-CODE	
LON 61-483W	HR 20.9	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 997.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
209	0000	0420	32560		2585	14644
209	0010	0237	32596		2604	14568
209	0030	0298	32818		2617	14601
209	0070	0912	34444		2668	14876
209	0100	1047	34839	636	2676	14935
209	0150	1041	34923	522	2684	14942
209	0200	1043	35196	399	2705	14955
209	0250	0916	35097		2719	14915
209	0300	0766	34944	424	2730	14865
209	0400	0587	34874	481	2749	14810
209	0500	0509	34906	546	2761	14795
209	0634	0474	34958	681	2769	14803
209	0737	0451	34967		2773	14811
209	0841	0438	34972	619	2774	14823
209	1061	0407	34967	652	2777	14847
209	1265	0389	34947	668	2778	14873
209	1583	0375	34957	652	2780	14921
209	2103	0342	34957	660	2783	14995

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0420	32560		2585	14644	0000	00000	2158
0010	0237	32596		2604	14568	0021	00001	1975
0020	0222 H	3267 B		2611	14564	0040	00004	1908
0030	0298	32818		2617	14601	0059	00009	1856
0050	0595 I	3361 I		2648	14739	0094	00023	1562
0075	0948 B	3454 C		2670	14891	0131	00046	1364
0100	1047	34839		2676	14935	0164	00076	1313
0125	1062 F	3491 I		2680	14945	0197	00114	1288
0150	1041	34923		2684	14942	0229	00159	1253
0175	1050 C	3507 F		2694	14951	0260	00210	1164
0200	1043	35196		2705	14955	0288	00264	1066
0225	0989 B	3517 C		2713	14939	0314	00321	0998
0250	0916	35097		2719	14915	0338	00380	0941
0300	0766	34944		2730	14865	0383	00506	0835
0400	0587	34874		2749	14810	0458	00772	0657
0500	0509	34906		2761	14795	0519	01051	0549
0600	0479	34946		2768	14800	0572	01348	0493
0700	0458	34966		2772	14808	0620	01671	0466

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0443	34971		2774	14818	0667	02030	0453
1000	0415	34970		2777	14840	0757	02866	0440
1200	0394	34953		2778	14864-	0847	03883	0445
1500	0378	34952		2779	14908	0983	05785	0452
2000	0347	34952		2782	14980	1213	09932	0452

C-REF-NO 356	YR 1962	DEPTH 3292	WAVES 1 27X2	AIR T 04.3	VIS
CUNS. NO 042	MONTH 3	MXSAMPD 19	WAVES 2 2742	WET B 03.2	STN 042
LAT 42-148N	DAY 18	NO.DPTH 18	WND-DIR 310	WW-CODE	
LON 61-387W	HR 00.3	W-COLOR	WND-SPD 06	CLO-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 998.	CLO-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
003	0000	0230	32540		2600	14562
003	0012	0242	32609		2605	14570
003	0032	0257	32720		2613	14582
003	0082	0688	33779		2650	14783
003	0106	0920	34472		2669	14885
003	0161	1170	35342	412	2693	14995
003	0213	1027	35179	383	2706	14951
003	0265	0952	35129	408	2715	14931
003	0320	0761	34934	652	2730	14866
003	0427	0599	34899	481	2750	14819
003	0534	0509		619		
003	0591	0482	34943	571	2767	14799
003	0681	0456	34956		2771	14804
003	0777	0433	34955	619	2774	14810
003	0968	0408	34950	636	2776	14831
003	1157	0396	34923	619	2775	14858
003	1445	0380	34896	611	2775	14899
003	1929	0356	34958	652	2782	14971

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0230	32540		2600	14562	0000	00000	2012
0010	0228 D	3258 C		2603	14563	0020	00001	1985
0020	0243 B	3264 B		2608	14573	0040	00004	1944
0030	0254	32705		2612	14580	0059	00009	1906
0050	0376 I	3301 F		2625	14640	0096	00024	1783
0075	0609 E	3358 C		2644	14748	0139	00051	1604
0100	0865 B	3430 C		2665	14861	0177	00085	1420
0125	1052	34890		2679	14942	0211	00124	1290
0150	1152	35251		2689	14986	0243	00169	1206
0175	1146 G	3534 I		2697	14989	0272	00218	1136
0200	1077 G	3526 H		2704	14968	0300	00271	1078
0225	1011 C	3517 B		2708	14947	0327	00330	1039
0250	0975 C	3514 B		2713	14938	0353	00392	1002
0300	0833 D	3501 C		2725	14891	0400	00526	0888
0400	0623 C	3488 C		2745	14824	0480	00809	0697
0500	0531	3491 B		2759	14804	0544	01102	0571
0600	0479	34945		2768	14800	0598	01404	0495
0700	0451	34956		2772	14805	0647	01728	0463

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0429	34955		2774	14812	0693	02083	0448
1000	0405	34946		2776	14836	0783	02922	0446
1200	0393	34917		2775	14864	0876	03978	0471
1500	0377	34903		2775	14907	1022	06009	0486

C-REF-NO 356 YR 1962 DEPTH 3959 WAVES 1 32X2 AIR T 03.9 VIS
 CONS. NO 043 MONTH 3 MXSAMPD 20 WAVES 2 3242 WET B 02.9 STN 043
 LAT 41-568N DAY 18 NO.DPTH 18 WND-DIR 330 WW-CODE
 LON 61-290W HR 04.0 W-COLOR WND-SPD 06 CLD-TPE
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 999. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
040	0000	0330	32855		2617	14610
040	0010	0329	32884		2620	14611
040	0022	0511	33383		2640	14697
040	0071	1051	34880		2679	14932
040	0096	1086	34977	628	2680	14950
040	0150	1130	35097	611	2681	14976
040	0199	1132	35100	611	2681	14985
040	0253	1101	35352	359	2707	14986
040	0302	0968	35204	342	2718	14944
040	0411	0652	34875	448	2741	14837
040	0520	0542	34942	522	2760	14812
040	0588	0503	34947	554	2765	14808
040	0684	0473	34959		2770	14811
040	0782	0449	34960	611	2772	14818
040	0982	0417	34955	636	2775	14838
040	1180	0399	34957	636	2777	14863
040	1481	0377	34952	652	2779	14904
040	1985	0352	34952	652	2782	14979

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0330	32855		2617	14610	0000	00000	1853
0010	0329	32884		2620	14611	0019	00001	1831
0020	0474 C	3328 C		2637	14680	0036	00004	1669
0030	0632 D	3372 E		2652	14751	0052	00008	1526
0050	0878 F	3440 I		2670	14859	0081	00019	1359
0075	1062 B	3491 C		2679	14938	0115	00041	1280
0100	1091	34990		2680	14953	0147	00070	1277
0125	1115	35057		2681	14966	0179	00107	1276
0150	1130	35097		2681	14976	0211	00152	1279
0175	1135	3509 C		2680	14982	0244	00206	1298
0200	1132	35105		2682	14985	0276	00269	1289
0225	1127 B	3523 G		2693	14989	0307	00337	1192
*0250	1105	3534 B		2705	14987	0336	00407	1080
0300	0974	35214		2718	14947	0388	00552	0960
0400	0680 B	3490 B		2739	14847	0475	00859	0763
0500	0552 B	3492 C		2757	14813	0543	01172	0594
0600	0498	34949		2766	14808	0599	01487	0516
0700	0469	34960		2770	14812	0650	01823	0483

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0445	34960		2773	14819	0697	02193	0465
1000	0415	34955		2776	14840	0790	03051	0451
1200	0397	34957		2778	14866	0881	04081	0447
1500	0376	34955		2780	14907	1017	05974	0447
2000	0352	34952		2782	14982	1247	10135	0458

C-REF-NO 356 YR 1962 DEPTH 4242 WAVES 1 32X2 AIR T 04.0 VIS
 CONS. NO 044 MONTH 3 MXSAMPD 18 WAVES 2 3242 WET B 02.5 STN 044
 LAT 41-375N DAY 18 NO.DPTH 18 WND-DIR 330 WW-CODE
 LON 61-180W HR 07.2 W-COLOR WND-SPD 05 CLD-TPE
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1000. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
072	0000	0900	34740		2693	14864
072	0008	0332	34741		2767	14638
072	0029	0980	34739		2680	14898
072	0074	0985	34745		2680	14907
072	0095	1082	34996	636	2682	14949
072	0146	1149	35194	611	2685	14983
072	0194	1168	35256	595	2687	14999
072	0245	1241	35482	571	2690	15035
072	0298	1021	35118	421	2703	14962
072	0401	0784	35008	408	2732	14889
072	0515	0624	34975	489	2752	14845
072	0539	0592	34987	510	2757	14836
072	0636	0502	34963		2766	14815
072	0735	0468	34964	611	2770	14818
072	0877	0433	34962	619	2774	14827
072	1049	0413	34964	636	2777	14847
072	1313	0392	34966	636	2779	14883
072	1806	0364	34967	652	2782	14954

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0900	34740		2693	14864	0000	00000	1129
0010	0336 I	34741		2767	14640	0008	00000	0436
0020	0538 I	34740		2745	14726	0013	00001	0647
0030	0989 D	34735		2678	14901	0023	00004	1278
0050	1083 I	3470 G		2659	14938	0051	00015	1468
0075	0989	34756		2680	14909	0085	00037	1273
0100	1095 B	3503 B		2683	14955	0117	00066	1254
0125	1139 D	3516 E		2684	14976	0149	00102	1245
0150	1150	35199		2686	14985	0180	00146	1241
0175	1160 B	3523 C		2686	14992	0211	00199	1242
0200	1182 C	3529 C		2687	15005	0242	00259	1242
0225	1226 G	3542 G		2688	15026	0274	00327	1238
0250	1225 C	3546 C		2691	15030	0305	00403	1215
0300	1015	35112		2703	14960	0363	00567	1103
0400	0785	35007		2732	14890	0461	00912	0835
0500	0642	34972		2750	14849	0537	01259	0671
0600	0528	3498 B		2764	14820	0598	01600	0532
0700	0476	34962		2769	14815	0649	01944	0490

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0450	34963		2772	14821	0698	02317	0468
1000	0417	34963		2776	14841	0791	03174	0448
1200	0400	34965		2778	14867-	0881	04198	0444
1500	0378	34967		2780	14908	1016	06071	0441

C-REF-NO 356 YR 1962 DEPTH 4389 WAVES 1 XX AIR T 04.9 VIS
 CONS. NO 045 MONTH 3 MXSAMPD 24 WAVES 2 XX WET B 03.1 STN 045
 LAT 41-202N DAY 18 NO.DPTH 18 WND-DIR 320 WW-CODE
 LON 61-100W HR 10.9 W-COLOR WND-SPD 09 CLD-TPE
 MARSD SQ 151 C/I 1801 W-TRNSP BARO 1002. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
109	0000	0540	33540		2649	14707
109	0009	0572	33597		2650	14722
109	0028	1255	35498		2689	15004
109	0074	1259	35516		2689	15013
109	0097	1258	35512	595	2689	15017
109	0149	1258	35526	579	2690	15026
109	0201	1264	35546	579	2691	15036
109	0248	1099	35388	375	2710	14985
109	0300	0958	35223	342	2722	14941
109	0400	0742	35060	408	2743	14873
109	0507	0608	34983	473	2755	14837
109	0612	0541		619		
109	0731	0448	34945		2771	14809
109	0852	0435	34957	628	2774	14823
109	1099	0412	34974	644	2777	14855
109	1348	0392	34977	652	2780	14889
109	1722	0364	34958	653	2781	14940
109	2352	0330	34992	644	2787	15033

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0540	33540		2649	14707	0000	00000	1546
0010	0603 E	3368 G		2653	14736	0015	00001	1514
0020	0941 I	3462 I		2677	14881	0030	00003	1287
0030	1280 H	3557 I		2689	15014	0042	00006	1179
0050	1403 I	3591 I		2690	15062	0066	00016	1173
0075	1259	35516		2689	15014	0095	00035	1189
0100	1258	35512		2689	15017	0125	00062	1196
0125	1257	35517		2690	15021	0156	00097	1199
0150	1259	35527		2690	15026	0186	00139	1201
0175	1273 D	3555 B		2689	15035	0216	00190	1219
*0200	1265	35547		2690	15036	0247	00249	1211
0225	1188 D	3548 B		2700	15013	0276	00314	1125
0250	1093	35381		2710	14983	0304	00380	1029
0300	0958	35223		2722	14941	0353	00518	0926
0400	0742	35060		2743	14873	0437	00814	0732
0500	0614	34986		2754	14839	0505	01128	0624
0600	0547	34952		2760	14828	0566	01470	0575
0700	0469 B	34943		2769	14812	0620	01829	0496

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0435 B	34951		2773	14815	0668	02201	0459
1000	0421	34969		2776	14842	0760	03052	0448
1200	0404	34977		2779	14869	0850	04071	0440
1500	0380	34969		2780	14909	0984	05940	0443
2000	0348	3498 B		2784	14980	1207	09962	0435

C-REF-NO 356	YR 1962	DEPTH 4480	WAVES 1 32X2	AIR T 07.3	VIS
CONS. NO 046	MONTH 3	MXSAMPD 23	WAVES 2 3242	WET B 06.2	STN 046
LAT 41-010N	DAY 18	NO.DPTH 18	WND-DIR 350	WW-CODE	
LON 61-030W	HR 14.9	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1004.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0000	1225	35510		2695	14990
149	0014	1249	35508		2691	15000
149	0032	1249	35528		2692	15003
149	0078	1250	35504		2690	15011
149	0102	1257	35521	570	2690	15017
149	0152	1254	35521	570	2691	15025
149	0203	1262	35534	636	2690	15036
149	0249	1269	35562	554	2691	15046
149	0300	1193	35479	424	2699	15028
149	0397	0928	35174	334	2723	14945
149	0500	0711	35052	424	2746	14878
149	0561	0582	34936	489	2755	14835
149	0676	0521	34975		2765	14830
149	0800	0464	34976	587	2772	14827
149	1046	0419	34982	628	2777	14849
149	1295	0397	34974	619	2779	14882
149	1670	0370	34966	636	2781	14933
149	2292	0330	34968	636	2785	15022

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1225	35510		2695	14990	0000	00000	1110
0010	1239 B	35514		2693	14996	0011	00001	1135
0020	1251	35514		2691	15002	0023	00002	1160
0030	1250	35526		2692	15003	0035	00005	1153
0050	1248	3552 B		2692	15006	0058	00015	1159
0075	1250	35506		2690	15010	0087	00034	1179
0100	1256	35519		2690	15017	0117	00061	1188
0125	1256	35523		2690	15021	0147	00095	1192
0150	1254	35521		2691	15024	0177	00138	1196
0175	1257	35525		2690	15029	0207	00188	1205
0200	1261	35533		2690	15035	0238	00247	1215
0225	1270 B	35553		2690	15042	0269	00314	1223
0250	1268	35561		2691	15046	0299	00389	1220
0300	1193	35479		2699	15028	0359	00558	1151
0400	0921	35170		2724	14943	0464	00929	0926
0500	0711	35052		2746	14878	0547	01306	0709
0600	0548 D	3493 D		2759	14828	0612	01674	0590
0700	0509	34977		2767	14829	0668	02047	0520

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0464	34976		2772	14827	0719	02435	0476
1000	0423	34981		2777	14844	0812	03292	0442
1200	0404	34978		2779	14869-	0901	04303	0440
1500	0382	34969		2780	14910	1036	06177	0445
2000	0347	34965		2783	14980	1261	10244	0442

C-REF-NO 356	YR 1962	DEPTH 4645	WAVES 1 32X3	AIR T 08.7	VIS
CONS. NO 047	MONTH 3	MXSAMPD 23	WAVES 2 3242	WET B 06.8	STN 047
LAT 40-430N	DAY 18	NO.DPTH 18	WND-DIR 310	WW-CODE	
LON 60-530W	HR 18.3	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
183	0000	1390	35750		2681	15048
183	0009	1393	35754		2680	15050
183	0032	1394	35749		2680	15054
183	0076	1396	35752		2679	15062
183	0105	1395	35744	546	2679	15067
183	0153	1393	35750	538	2680	15074
183	0205	1358	35709	456	2684	15070
183	0253	1237	35549	359	2696	15036
183	0305	1130	35423	359	2707	15006
183	0404	0850	35115	359	2731	14916
183	0507	0694	35063	424	2750	14872
183	0625	0535	35011	587	2766	14828
183	0753	0478	34997		2772	14825
183	0869	0458	35006	535	2775	14836
183	1106	0411	34990	619	2779	14856
183	1341	0388	34980	628	2780	14886
183	1704	0363	34976	628	2783	14936
183	2308	0324	34968	636	2786	15022

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1390	35750		2681	15048	0000	00000	1252
0010	1393	35754		2680	15051	0013	00001	1258
0020	1394	35753		2680	15052	0025	00003	1264
*0030	1394	35750		2680	15054	0038	00006	1269
0050	1395	35750		2679	15058	0064	00016	1276
0075	1396	35752		2679	15062	0096	00037	1284
0100	1395	35745		2679	15066	0128	00066	1295
0125	1396	35748		2679	15070	0161	00104	1302
0150	1394	35750		2680	15074	0194	00150	1303
0175	1386 B	35744		2681	15075	0227	00205	1300
0200	1364	35717		2683	15072	0259	00268	1282
0225	1311 B	3565 B		2689	15058	0291	00337	1235
0250	1245	35560		2695	15038	0321	00411	1178
0300	1140	35435		2706	15009	0379	00572	1087
0400	0861	35126		2730	14920	0477	00920	0862
0500	0702	35062		2749	14874	0555	01278	0689
0600	0564	35020		2764	14835	0618	01627	0546
0700	0492 B	34999		2770	14822	0670	01973	0483

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0468	35000		2773	14829	0718	02342	0463
1000	0431	35000		2777	14847	0809	03185	0438
1200	0400	34985		2780	14867	0897	04180	0429
1500	0376	34977		2781	14908	1028	06003	0431
2000	0341	34969		2784	14977	1247	09959	0431

C-REF-NO 356	YR 1962	DEPTH 4750	WAVES 1 32X3	AIR T 08.9	VIS
CONS. NO 048	MONTH 3	MXSAMPD 21	WAVES 2 3282	WET B 06.5	STN 048
LAT 40-260N	DAY 18	NO.DPTH 18	WND-DIR 290	WW-CODE	
LON 60-450W	HR 22.3	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1005.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
223	0000	1325	35690		2689	15026
223	0011	1390	35681		2675	15049
223	0025	1391	35681		2675	15051
223	0068	1390	35677		2675	15058
223	0089	1386	35685	571	2676	15060
223	0131	1389	35720	562	2678	15069
223	0174	1404	35776	554	2680	15081
223	0216	1192	35519	367	2703	15014
223	0262	1112	35408	367	2709	14992
223	0346	0927	35207	334	2726	14937
223	0439	0775	35091	375	2740	14893
223	0595	0574	35040	554	2764	14839
223	0701	0523	35039	505	2770	14836
223	0803	0472	35011	571	2774	14831
223	1025	0426	34996	604	2778	14849
223	1243	0399	34981		2779	14874
223	1575	0375	34980	634	2782	14920
223	2139	0342	34977	635	2785	15001

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1325	35690		2689	15026	0000	00000	1167
0010	1371 E	35684		2679	15042	0012	00001	1265
0020	1396 B	35680		2674	15052	0025	00003	1320
0030	1391	35680		2675	15052	0039	00006	1314
0050	1391	35677		2675	15056	0065	00017	1322
0075	1389	35679		2675	15059	0098	00038	1323
0100	1386	35692		2677	15062	0132	00068	1314
0125	1388	35714		2678	15067	0165	00106	1310
0150	1409 E	3576 D		2677	15079	0198	00153	1325
0175	1399	35771		2680	15080	0231	00209	1307
0200	1278 G	3563 E		2694	15042	0262	00269	1179
0225	1171 B	35490		2704	15008	0291	00331	1083
0250	1126 C	3543 B		2708	14995	0318	00396	1053
0300	1029 B	35311		2716	14967	0369	00541	0980
0400	0834	35129		2734	14910	0460	00863	0818
0500	0683 B	3506 B		2751	14867	0535	01206	0667
0600	0571	35040		2764	14838	0596	01548	0541
0700	0523	35039		2770	14836	0648	01896	0492

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0473	35012		2774	14831	0696	02267	0461
1000	0428	34996		2777	14846	0787	03107	0438
1200	0403	34984		2779	14869	0876	04108	0435
1500	0379	34979		2781	14909	1008	05948	0434
2000	0347	34974		2784	14980	1229	09940	0435

C-REF-NO 356	YR 1962	DEPTH 4828	WAVES 1 32X3	AIR T 08.6	VIS
CONS. NO 049	MONTH 3	MXSAMPD 20	WAVES 2 3282	WET B 06.4	STN 049
LAT 40-070N	DAY 19	NO.DPTH 18	WND-DIR 270	WW-CODE	
LON 60-360W	HR 02.1	W-COLOR	WND-SPD 13	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1008.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
021	0000	1380	35710		2680	15044
021	0009	1394	35716		2677	15050
021	0025	1394	35715		2677	15053
021	0079	1396	35715		2677	15062
021	0104	1395	35709	587	2676	15066
021	0192	1396	35712	587	2676	15081
021	0213	1311	35625	456	2687	15055
021	0269	1084	35368	375	2711	14983
021	0326	0919	35179	342	2725	14930
021	0447	0696	35058	445	2749	14863
021	0574	0565	35014	522	2763	14831
021	0596	0538	35021	530	2767	14824
021	0648	0511	35011	554	2769	14822
021	0738	0476	34999	579	2772	14822
021	0930	0436	34995	611	2777	14837
021	1125	0420	35000		2779	14863
021	1440	0387	34978	619	2780	14902
021	1969	0353	34979	636	2784	14977

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1380	35710		2680	15044	0000	00000	1261
0010	1394	35716		2677	15051	0013	00001	1288
0020	1396	35716		2677	15053	0026	00003	1294
0030	1394	35715		2677	15054	0039	00006	1294
0050	1395	35716		2677	15057	0065	00017	1301
*0075	1396	35715		2677	15062	0098	00038	1311
0100	1395	35710		2676	15065	0131	00068	1320
0125	1421 I	3574 E		2673	15078	0165	00107	1362
0150	1431 I	3575 G		2671	15086	0199	00156	1383
*0175	1418 H	3573 D		2673	15085	0234	00214	1372
0200	1366	35681		2680	15072	0268	00279	1311
0225	1260	35568		2693	15039	0300	00347	1192
0250	1157 B	35453		2704	15007	0328	00417	1092
0300	0988	35255		2719	14952	0380	00562	0952
0400	0767 B	3508 C		2740	14883	0466	00867	0754
0500	0631 B	35039		2756	14846	0535	01181	0607
0600	0535	35021		2767	14824	0591	01497	0508
0700	0489	35003		2771	14821	0641	01829	0476

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0459	34996		2774	14825	0688	02192	0455
1000	0429	34997		2777	14846	0778	03027	0438
1200	0412	34996		2779	14873	0867	04031	0437
1500	0386 B	3499 B		2781	14912	1000	05881	0436
2000	0351	34978		2784	14982	1222	09895	0438

C-REF-NO 356	YR 1962	DEPTH 4864	WAVES 1 32X3	AIR T 09.0	VIS
CONS. NO 050	MONTH 3	MXSAMPD 06	WAVES 2 3282	WET B 06.1	STN 050
LAT 39-470N	DAY 19	NO.DPTH 11	WND-DIR 280	WW-CODE	
LON 60-240W	HR 07.2	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 115	C/I 1801	W-TRNSP	BARO 1009.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
072	0000	1720	35970		2623	15153
072	0010	1687	35935		2628	15145
072	0030	1622	35865		2638	15127
072	0076	1472	35681		2658	15086
072	0101	1518	36017	518	2673	15109
072	0155	1377	35722	465	2681	15069
072	0210	1246	35548	355	2694	15032
072	0269	1074	35363	326	2712	14979
072	0327	0938	35218	331	2725	14938
072	0449	0784	35090	359	2739	14898
072	0597	0562	35025	505	2764	14834

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1720	35970		2623	15153	0000	00000	1799
0010	1687	35935		2628	15145	0018	00001	1753
0020	1654	35900		2633	15136	0035	00004	1709
0030	1622	35865		2638	15127	0052	00008	1665
0050	1538 F	3572 I		2646	15103	0085	00021	1593
0075	1474	35680		2657	15086	0124	00046	1496
0100	1516	36003		2673	15108	0160	00078	1357
0125	1475 G	3596 I		2679	15098	0193	00117	1306
0150	1397 C	3578 E		2681	15075	0226	00163	1290
0175	1330	35651		2685	15056	0258	00216	1255
0200	1270	35575		2692	15039	0289	00276	1201
0225	1202	35499		2699	15019	0319	00340	1134
0250	1129	35420		2707	14996	0346	00408	1065
0300	0997	35280		2719	14956	0397	00550	0949
0400	0837 D	3512 B		2733	14911	0487	00870	0827
0500	0677 I	3503 D		2749	14864	0563	01218	0680
0600	0559	35026		2765	14833	0624	01561	0535

C-REF-NO 356	YR 1962	DEPTH 4750	WAVES 1 32X3	AIR T 10.0	VIS
CONS. NO 051	MONTH 3	MXSAMPD 11	WAVES 2 3282	WET B 05.1	STN 051
LAT 39-280N	DAY 19	NO.DPTH 18	WND-DIR 320	WW-CODE	
LON 60-160W	HR 11.8	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 115	C/I 1801	W-TRNSP	BARO 1009.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
118	0000	1998	36490		2592	15238
118	0008	2064	36485		2574	15257
118	0035	2065	36486		2574	15262
118	0094	2069	36486		2573	15273
118	0126	2045	36519	489	2582	15272
118	0189	1872	36535	440	2628	15235
118	0253	1804	36497	473	2643	15226
118	0322	1744	36402	481	2650	15218
118	0387	1615	36180	416	2664	15188
118	0437	1470	35926	359	2677	15148
118	0484	1329	35721	359	2691	15107
118	0521	1262	35616	342	2696	15089
118	0544	1162	35472	326	2705	15057
118	0645	0906	35182	334	2727	14978
118	0650	0895	35162	323	2727	14974
118	0746	0693	35049		2749	14911
118	0879	0534	35012	595	2767	14869
118	1077	0451	34990	595	2774	14868

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1998	36490		2592	15238	0000	00000	2091
0010	2070 B	36485		2572	15259	0022	00001	2282
0020	2086 G	36484		2568	15265	0045	00005	2327
*0030	2078 D	36485		2570	15265	0069	00011	2310
0050	2069	36482		2572	15265	0115	00030	2296
0075	2071 B	36482		2572	15270	0173	00067	2311
0100	2067	36492		2574	15273	0231	00119	2303
0125	2046	36518		2581	15272	0288	00185	2240
0150	1983 E	36532		2599	15259	0342	00261	2078
0175	1913 D	36537		2618	15244	0393	00345	1910
0200	1856	36532		2632	15232	0439	00434	1782
0225	1826 B	36520		2639	15228	0483	00530	1728
*0250	1806	36500		2642	15226	0527	00636	1702
0300	1767 B	36443		2648	15222	0611	00875	1667
0400	1579	36116		2667	15178	0772	01446	1507
0500	1305 C	3568 B		2693	15101	0912	02089	1272
0600	1015	35288		2717	15012	1029	02742	1040
0700	0785	35087		2738	14940	1123	03368	0828

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0615	35025		2757	14889	1197	03935	0639
1000	0451 B	3497 C		2773	14855	1311	04972	0484

C-REF-NO 356	YR 1962	DEPTH 4901	WAVES 1 32X3	AIR T 10.3	VIS
CONS. NO 052	MONTH 3	MXSAMPD 22	WAVES 2 3282	WET B 07.6	STN 052
LAT 39-090N	DAY 19	NO.DPTH 18	WND-DIR 310	WW-CODE	
LON 60-060W	HR 16.4	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 115	C/I 1801	W-TRNSP	BARO 1010.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
164	0000	2050	36475		2577	15252
164	0013	2035	36478		2581	15250
164	0037	2031	36479		2582	15253
164	0087	1861	36492		2628	15215
164	0120	1853	36505	505	2631	15218
164	0176	1837	36478	522	2633	15222
164	0232	1841	36505	522	2634	15233
164	0288	1831	36487	522	2635	15239
164	0349	1809	36475	489	2640	15243
164	0467	1725	36374	473	2653	15236
164	0583	1569	36093	440	2668	15205
164	0619	1282	35647	391	2695	15112
164	0730	0974	35276	347	2723	15018
164	0841	0740	35084	407	2745	14946
164	1053	0495	34998	538	2770	14882
164	1259	0451	34998		2775	14899
164	1579	0410	34991	603	2779	14935
164	2154	0355	34970	628	2783	15009

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2050	36475		2577	15252	0000	00000	2234
0010	2046 C	36476		2578	15253	0022	00001	2227
0020	2035 B	36478		2581	15251	0045	00005	2200
0030	2033 B	36479		2582	15253	0067	00010	2199
0050	1988 G	36481		2594	15244	0110	00028	2091
0075	1903 F	36488		2617	15224	0160	00060	1884
0100	1853 B	36498		2630	15214	0206	00101	1764
0125	1851	36503		2631	15218	0250	00152	1765
0150	1843	36491		2632	15220	0295	00215	1763
*0175	1837	36479		2633	15222	0339	00289	1766
0200	1838	36489		2633	15227	0384	00375	1770
0225	1840	36501		2634	15231	0429	00472	1775
0250	1839	36501		2634	15235	0473	00581	1781
0300	1828	36485		2636	15240	0563	00835	1782
0400	1781	36449		2645	15242	0740	01470	1730
0500	1744 I	3639 I		2649	15248	0914	02274	1717
0600	1435 D	3588 C		2681	15163	1073	03162	1422
0700	1011 I	3529 I		2718	15027	1198	03987	1051

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0818	35139		2738	14970	1294	04727	0860
1000	0534	3500 B		2765	14889	1439	06041	0574
1200	0453 C	34994		2775	14890	1547	07254	0491
1500	0418	34993		2778	14925	1694	09296	0475
2000	0363	34978		2783	14987	1931	13552	0456

C-REF-NO 356	YR 1962	DEPTH 4860	WAVES 1 32X4	AIR T 11.5	VIS
CONS. NO 053	MONTH 3	MXSAMPD 24	WAVES 2 3282	WET B 08.2	STN 053
LAT 38-520N	DAY 19	NO.DPTH 18	WND-DIR 280	WW-CODE	
LON 59-580W	HR 20.7	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 114	C/I 1801	W-TRNSP	BARO 1009.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
207	0000	1840	36510		2635	15195
207	0010	1927	36517		2613	15221
207	0033	1927	36509		2612	15224
207	0081	1863	36486		2627	15214
207	0105	1852	36491	522	2630	15215
207	0158	1842	36490	530	2632	15221
207	0210	1841	36499	546	2633	15229
207	0258	1834	36491	530	2635	15235
207	0311	1803	36481	473	2642	15235
207	0411	1753	36429	489	2650	15236
207	0516	1657	36266	473	2660	15223
207	0690	1293	35649	456	2693	15128
207	0796	1046	35308	331	2713	15055
207	0925	0740	35083	407	2745	14960
207	1165	0497	35005	546	2770	14902
207	1405	0437	34992		2776	14917
207	1774	0390	34967	619	2779	14959
207	2410	0354	34969	636	2783	15053

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1840	36510		2635	15195	0000	00000	1688
0010	1927	36517		2613	15221	0018	00001	1898
0020	1945 E	36516		2608	15227	0037	00004	1948
0030	1935 C	36511		2610	15226	0057	00009	1931
0050	1906 C	36499		2617	15221	0095	00025	1874
0075	1872 B	36488		2625	15216	0142	00054	1808
0100	1854	36490		2630	15215	0187	00095	1771
0125	1847	36491		2631	15217	0231	00146	1762
0150	1843	36490		2632	15220	0276	00209	1762
0175	1842	36493		2633	15223	0320	00283	1766
0200	1841	36498		2633	15228	0365	00369	1771
0225	1840	36497		2633	15231	0409	00466	1778
0250	1836	36493		2634	15234	0454	00575	1780
0300	1810	36484		2640	15235	0543	00826	1742
0400	1759	36438		2649	15236	0716	01446	1687
0500	1676	36300		2659	15226	0883	02217	1626
0600	1500 D	3599 E		2675	15185	1040	03101	1485
0700	1270	35613		2695	15121	1181	04038	1306

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	1036	35298		2714	15052	1303	04976	1113
1000	0631 D	3503 D		2756	14929	1485	06617	0686
1200	0482 B	35001		2772	14901	1608	07989	0524
1500	0421	34985		2777	14927	1762	10117	0486
2000	0362 B	34968		2782	14986	2002	14441	0461

C-REF-NO 356	YR 1962	DEPTH 4954	WAVES 1 32X4	AIR T 11.3	VIS
CONS. NO 054	MONTH 3	MXSAMPD 23	WAVES 2 3282	WET B 09.7	STN 054
LAT 38-230N	DAY 20	NO.DPTH 18	WND-DIR 350	WW-CODE	
LON 59-440W	HR 01.0	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 114	C/I 1801	W-TRNSP	BARO 1010.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
010	0000	1768	36510		2652	15174
010	0010	1895	36506		2620	15212
010	0027	1877	36503		2625	15209
010	0067	1833	36514		2637	15204
010	0092	1831	36500	513	2636	15207
010	0134	1832	36502	522	2636	15214
010	0181	1830	36500	522	2636	15221
010	0228	1828	36508	522	2637	15229
010	0274	1827	36497	522	2637	15236
010	0367	1777	36454	473	2646	15236
010	0467	1715	36351	456	2653	15233
010	0704	1321	35692	408	2690	15140
010	0819	1108	35418	375	2710	15083
010	0933	0830	35150	375	2737	14996
010	1162	0531	35010	526	2767	14915
010	1400	0442	34996		2776	14918
010	1740	0400	34976	619	2779	14958
010	2343	0357	34969	619	2783	15042

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1768	36510		2652	15174	0000	00000	1518
0010	1895	36506		2620	15212	0017	00001	1828
0020	1902 F	36504		2618	15215	0035	00004	1851
0030	1873	36504		2626	15209	0054	00008	1782
0050	1849	36510		2632	15205	0089	00023	1727
0075	1831	36510		2637	15204	0132	00050	1694
0100	1831	36499		2636	15208	0175	00089	1710
0125	1832	36500		2636	15213	0218	00139	1720
0150	1832	36501		2636	15217	0262	00200	1728
0175	1830	36500		2636	15220	0305	00273	1734
0200	1829	36504		2637	15224	0349	00357	1737
0225	1828	36508		2637	15228	0393	00453	1741
0250	1828	36504		2637	15232	0437	00560	1753
0300	1817	36489		2639	15237	0525	00810	1753
0400	1760	36429		2648	15236	0699	01434	1696
0500	1672 C	3627 D		2657	15225	0867	02209	1636
0600	1519 F	3601 G		2672	15191	1026	03104	1512
*0700	1329	35705		2690	15142	1171	04069	1359

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	1146	35462		2707	15093	1300	05062	1199
1000	0714 C	3508 D		2748	14962	1500	06869	0777
1200	0508 B	35003		2769	14912	1636	08377	0558
1500	0424 B	34990		2777	14928	1794	10568	0486
2000	0354 E	34971		2783	14983	2031	14821	0447

C-REF-NO 356	YR 1962	DEPTH 4123	WAVES 1 32X1	AIR T 05.0	VIS
CONS. NO 055	MONTH 3	MXSAMPD 20	WAVES 2 3242	WET B 02.8	STN 055
LAT 40-450N	DAY 21	NO.DPTH 18	WND-DIR 030	WW-CODE	
LON 63-440W	HR 01.5	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1017.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
015	0000	1232	35170		2668	14988
015	0010	1240	35177		2667	14992
015	0029	1244	35187		2667	14997
015	0079	1224	35270		2677	14999
015	0103	1221	35321	603	2682	15003
015	0158	1270	35497	587	2686	15031
015	0212	1083	35241	391	2701	14972
015	0262	0962	35181	367	2718	14935
015	0316	0779	34988	408	2732	14873
015	0420	0639	35010	473	2753	14836
015	0529	0528	35009	619	2767	14809
015	0623	0490	34998	571	2771	14809
015	0714	0458	34991	595	2774	14811
015	0813	0440	34997	620	2776	14820
015	1000	0413	34987	620	2778	14839
015	1194	0393	34976		2780	14863
015	1489	0368	34964	636	2781	14902
015	1988	0341	34964	652	2784	14975

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1232	35170		2668	14988	0000	00000	1373
0010	1240	35177		2667	14992	0014	00001	1385
0020	1243	35182		2666	14995	0028	00003	1390
0030	1244	35188		2667	14997	0042	00006	1389
0050	1237 B	35215		2670	14998	0070	00018	1362
*0075	1226	35261		2676	14999	0103	00039	1314
0100	1221	35314		2681	15002	0136	00069	1272
0125	1250 F	3541 E		2683	15018	0168	00105	1262
0150	1268 C	3548 C		2685	15029	0199	00150	1251
0175	1221 E	3543 F		2690	15016	0230	00202	1207
0200	1132 D	3531 E		2697	14988	0260	00259	1140
0225	1051 B	3522 B		2706	14962	0288	00319	1067
0250	0991 B	3519 B		2714	14944	0314	00382	0992
0300	0832 B	3505 C		2728	14891	0360	00514	0858
0400	0654 C	3499 D		2749	14838	0437	00785	0662
0500	0552	35011		2764	14814	0497	01058	0525
0600	0497	35001		2770	14808	0548	01343	0475
0700	0462	34992		2773	14810	0594	01655	0451

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0442	34996		2776	14818	0639	02000	0434
1000	0413	34987		2778	14839	0726	02804	0425
1200	0392	34976		2780	14864	0812	03783	0427
1500	0367	34964		2781	14904	0943	05596	0429
2000	0341	34964		2784	14977	1162	09561	0434

C-REF-NO 356	YR 1962	DEPTH 3328	WAVES 1 36X1	AIR T 02.3	VIS
CONS. NO 056	MONTH 3	MXSAMPD 20	WAVES 2 3642	WET B 00.0	STN 056
LAT 41-300N	DAY 21	NO.DPTH 18	WND-DIR 090	WW-CODE	
LON 63-440W	HR 07.0	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1018.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
070	0000	0465	33095		2623	14670
070	0010	0466	33108		2624	14672
070	0030	0491	33175		2626	14687
070	0075	0679	33878		2659	14780
070	0100	0941	34910	448	2700	14898
070	0150	0845	34930	424	2717	14870
070	0200	0715	34860	445	2731	14827
070	0250	0621	34836	456	2742	14798
070	0300	0599	34926	473	2752	14799
070	0400	0512	34937	554	2763	14780
070	0500	0460	34926	595	2768	14775
070	0648	0434	34947	619	2773	14789
070	0747	0426	34957	636	2775	14802
070	0846	0408	34962	644	2777	14811
070	1045	0391	34944	652	2777	14837
070	1244	0381	34945		2778	14866
070	1543	0366	34961	652	2781	14910
070	2042	0344	34963	660	2784	14985

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0465	33095		2623	14670	0000	00000	1800
0010	0466	33108		2624	14672	0018	00001	1792
0020	0474	33129		2624	14678	0036	00004	1786
0030	0491	33175		2626	14687	0054	00008	1769
0050	0541 D	3335 G		2634	14713	0089	00023	1696
0075	0679	33878		2659	14780	0129	00048	1471
0100	0941	34910		2700	14898	0161	00076	1087
0125	0947 I	3510 I		2714	14906	0187	00106	0964
0150	0845	34930		2717	14870	0211	00139	0934
0175	0780 B	3490 B		2724	14849	0233	00177	0867
0200	0715	34860		2731	14827	0255	00218	0808
0225	0661	34838		2737	14810	0274	00261	0756
0250	0621	34836		2742	14798	0293	00306	0708
0300	0599	34926		2752	14799	0326	00400	0620
0400	0512	34937		2763	14780	0384	00604	0517
0500	0460	34926		2768	14775	0434	00835	0475
0600	0438	34938		2772	14783	0481	01099	0451
0700	0430	34953		2774	14796	0526	01400	0441

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0417	34961		2776	14807	0570	01740	0429
1000	0393	34949		2777	14831	0657	02545	0429
1200	0383	34944		2778	14860	0745	03543	0439
1500	0368	34959		2781	14904	0878	05391	0435
2000	0346	34962		2783	14979	1100	09422	0443

C-REF-NO 356	YR 1962	DEPTH 2250	WAVES 1 09X1	AIR T 03.2	VIS
CONS. NO 057	MONTH 3	MXSAMPD 20	WAVES 2 3642	WET B 01.0	STN 057
LAT 42-050N	DAY 21	NO.DPTH 18	WND-DIR 070	WW-CODE	
LON 63-445W	HR 11.7	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
117	0000	0550	33490		2644	14711
117	0010	0599	33500		2639	14732
117	0030	0606	33523		2640	14739
117	0075	0825	34411		2679	14843
117	0100	0754	34527	497	2699	14822
117	0150	0858	34973	415	2718	14876
117	0200	0850	35087	367	2729	14882
117	0250	0676	34941	440	2743	14821
117	0300	0629	34951	473	2750	14811
117	0401	0533	34935	530	2761	14789
117	0502	0495	34949	554	2766	14790
117	0649	0455	34973	603	2773	14798
117	0748	0426	34957	636	2775	14802
117	0848	0419	34967	636	2776	14816
117	1048	0392	34952	685	2778	14838
117	1249	0383	34957		2779	14868
117	1548	0368	34960	660	2781	14912
117	2047	0343	34958	660	2783	14986

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0550	33490		2644	14711	0000	00000	1595
0010	0599	33500		2639	14732	0016	00001	1645
0020	0607 D	3350 B		2638	14737	0033	00003	1658
0030	0606	33523		2640	14739	0050	00008	1639
0050	0713 I	3390 I		2656	14790	0081	00020	1496
0075	0825	34411		2679	14843	0116	00043	1275
0100	0754	34527		2699	14822	0146	00069	1093
0125	0793 I	3475 F		2711	14844	0172	00099	0984
0150	0858	34973		2718	14876	0196	00133	0922
0175	0871	35067		2724	14886	0219	00171	0878
0200	0850	35087		2729	14882	0240	00212	0835
0225	0765 F	3502 D		2736	14853	0260	00256	0764
0250	0676	34941		2743	14821	0279	00301	0703
0300	0629	34951		2750	14811	0313	00397	0640
0400	0534	34935		2760	14789	0373	00609	0545
0500	0495	34949		2766	14790	0426	00853	0500
0600	0468	34968		2771	14795	0474	01127	0464
0700	0439	34965		2774	14800	0520	01433	0443

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0421	34961		2775	14809	0564	01775	0434
1000	0398	34957		2777	14833	0652	02585	0430
1200	0384	34955		2779	14860	0739	03575	0432
1500	0370	34960		2781	14905	0871	05416	0437
2000	0345	34959		2783	14979	1096	09467	0445

C-REF-NO 356	YR 1962	DEPTH 1006	WAVES 1 09X1	AIR T 03.0	VIS
CONS. NO 058	MONTH 3	MXSAMPD 05	WAVES 2 0942	WET B 01.4	STN 058
LAT 42-405N	DAY 21	NO.DPTH 12	WND-DIR 100	WW-CODE	
LON 63-440W	HR 16.0	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
160	0000	0285	32500		2593	14586
160	0008	0268	32527		2596	14580
160	0025	0361	32897		2618	14628
160	0063	0813	34216		2666	14834
160	0085	0929	34547	619	2674	14886
160	0128	0998	34978	473	2696	14924
160	0171	1035	35239	367	2710	14948
160	0215	0870	35035	383	2721	14892
160	0258	0808	35021	380	2730	14875
160	0347	0655	34945	440	2746	14829
160	0438	0523	34901	530	2759	14790
160	0537	0478	34931	579	2767	14789

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0285	32500		2593	14586	0000	00000	2084
0010	0273	3256 B		2598	14583	0021	00001	2033
0020	0321 B	3276 C		2610	14608	0041	00004	1919
0030	0420 F	3308 H		2626	14656	0059	00009	1770
0050	0657 I	3378 I		2654	14766	0092	00022	1513
0075	0886	3442 C		2671	14867	0128	00045	1359
0100	0967 C	34723		2681	14905	0161	00075	1266
0125	0997	34955		2694	14923	0192	00110	1150
0150	1031 D	3515 C		2703	14942	0220	00149	1068
0175	1022 B	3523 B		2711	14943	0246	00192	1003
0200	0932 F	3512 F		2718	14913	0270	00239	0938
0225	0852 B	3502 B		2723	14886	0294	00290	0889
0250	0816 B	3502 B		2728	14877	0315	00343	0845
0300	0736	34987		2738	14854	0356	00457	0760
0400	0571	34913		2754	14804	0425	00701	0608
0500	0491 B	34915		2764	14788	0482	00963	0520

C-REF-NO 356	YR 1962	DEPTH 137	WAVES 1	XX	AIR T 01.9	VIS
CONS. NO 059	MONTH 3	MXSAMPD 01	WAVES 2	XX	WET B 00.1	STN 059
LAT 43-040N	DAY 21	NO.DPTH 8	WND-DIR 090	WW-CODE		
LON 63-444W	HR 18.5	W-COLOR	WND-SPD 05	CLD-TPE		
MARSD SQ 151	C/I 1801	W-TRNSP	BARO	CLD-AMT		HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
185	0000	0322	32090		2557	14596
185	0005	0191	32099		2568	14540
185	0015	0175	32120	887	2571	14535
185	0025	0178	32180		2575	14538
185	0045	0359	32895	758	2618	14630
185	0070	0523	33439	701	2643	14710
185	0095	0818	34246	595	2668	14842
185	0125	0767	34311	481	2680	14828

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0322	32090		2557	14596	0000	00000	2425
0010	0161 F	32107		2571	14527	0024	00001	2294
0020	0172	3214 B		2572	14534	0047	00005	2279
0030	0214 D	3233 H		2585	14557	0069	00010	2158
0050	0389 C	3301 D		2624	14645	0109	00026	1794
0075	0589 F	3362 F		2650	14740	0151	00053	1554
0100	0751 I	3413 I		2669	14816	0188	00086	1382
0125	0767	34311		2680	14828	0221	00124	1275

C-REF-NO 356	YR 1962	DEPTH 192	WAVES 1 09X1	AIR T 01.5	VIS
CONS. NO 060	MONTH 3	MXSAMPD 02	WAVES 2 X0	WET B 00.2	STN 060
LAT 43-209N	DAY 21	NO.DPTH 9	WND-DIR 090	WW-CODE	
LON 63-440W	HR 20.4	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
204	.0000	0110	31855		2554	14499
204	0010	0130	31905		2557	14511
204	0020	0141	32049	888	2567	14519
204	0030	0159	32105		2571	14530
204	0050	0262	32480	798	2593	14584
204	0075	0381	32955		2620	14645
204	0100	0534	33454	701	2643	14720
204	0150	0616	34010	473	2677	14769
204	0170	0644	34141	473	2684	14785

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0110	31855		2554	14499	0000	00000	2455
0010	0130	31905		2557	14511	0025	00001	2429
0020	0141	32049		2567	14519	0048	00005	2326
0030	0159	32105		2571	14530	0072	00011	2294
0050	0262	32480		2593	14584	0116	00029	2083
0075	0381	32955		2620	14645	0165	00060	1828
0100	0534	33454		2643	14720	0208	00098	1615
0125	0595 F	3379 C		2663	14753	0247	00143	1438
0150	0616	34010		2677	14769	0281	00191	1303

C-REF-NO 356	YR 1962	DEPTH 230	WAVES 1 09X1	AIR T 00.5	VIS
CONS. NO 061	MONTH 3	MXSAMPD 02	WAVES 2 X0	WET B -00.2	STN 061
LAT 43-398N	DAY 21	NO.DPTH 9	WND-DIR 080	WW-CODE	
LON 63-440W	HR 22.3	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1801	W-TRNSP	BARO 1019.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
223	0000	-0020	31070		2497	14429
223	0010	-0071	31117		2503	14408
223	0020	-0082	31202	888	2510	14405
223	0030	-0030	31514		2533	14436
223	0050	0015	31760	847	2551	14463
223	0075	0145	32083		2570	14531
223	0100	0187	32346	709	2588	14557
223	0150	0607	33984	408	2676	14765
223	0230	0695	34429	489	2700	14819

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0020	31070		2497	14429	0000	00000	2995
0010	-0071	31117		2503	14408	0030	00002	2942
0020	-0082	31202		2510	14405	0059	00006	2873
0030	-0030	31514		2533	14436	0087	00013	2650
0050	0015	31760		2551	14463	0138	00034	2479
0075	0145	32083		2570	14531	0199	00072	2302
0100	0187	32346		2588	14557	0254	00122	2130
0125	0387 I	3314 I		2634	14658	0303	00177	1700
0150	0607	33984		2676	14765	0341	00230	1311
0175	0550 I	3385 I		2673	14744	0374	00286	1346
0200	0623 I	3415 I		2687	14781	0406	00348	1216
*0225	0684 F	3439 I		2698	14813	0436	00412	1120

PART II

(CODC Reference: CRN 361)

CNAV "Sackville"

DEPARTMENT OF MINES AND TECHNICAL SURVEYS

and

FISHERIES RESEARCH BOARD OF CANADA

Part II

Scotian Shelf and Grand Banks

Ship:	CNAV "Sackville"
Local cruise designation:	S-64
Cruise period:	July 23 - August 10, 1962.
Observers:	C. R. Mann
	T. R. Foote
	J. R. Chevrier
	M. E. MacLean
	R. Bailey

MARINE SCIENCES BRANCH

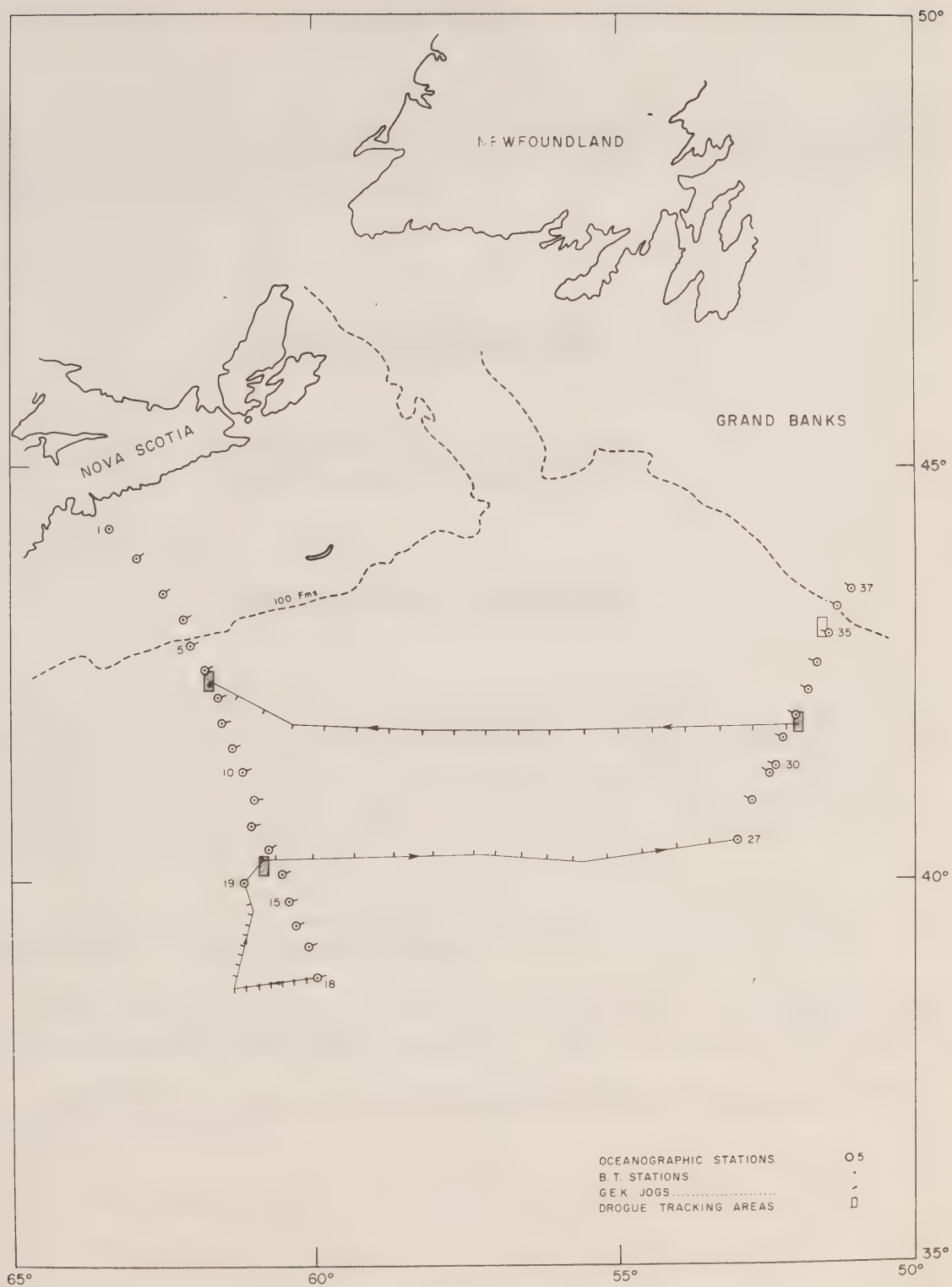
and

ATLANTIC OCEANOGRAPHIC GROUP

Bedford Institute of Oceanography, Dartmouth, N.S.

SECTION I

Description of data collection procedures



INTRODUCTION

The object of this cruise was to collect oceanographic data for a continuation of studies of ocean circulation in the area east of Nova Scotia to the Gulf Stream as well as south of the "Tail of the Grand Banks".

EXTRACT OF CRUISE LOG

Depart Halifax N. S. July 23, 1962
Return Halifax N. S. August 10, 1962

OBSERVATIONAL PROCEDURES

A total of 53 oceanographic stations was occupied employing Knudsen water bottles and Richter & Wiese reversing thermometers. Only the stations 1 - 19 inclusive and 27 - 37 inclusive are shown on the track chart, the remainder being within the confines of the drogue tracking areas. Observations were made to a depth of 2500 metres at most stations and to the bottom in shallow water. Two casts were usually made, the first being the deep one.

Surface temperatures were taken at each station with a metal bucket to 0.1°C. and a thermistor was towed between stations.

Dissolved oxygen content was determined below 30 m. at all stations except in the drogue tracking areas, using the modified Winkler technique (FRB Bulletin 125).

Salinities were determined at the Bedford Institute of Oceanography with an NIO conductive salinometer.

Weather was observed at each station by the ship's officers.

A GEK was towed on all tracks for surface current measurements.

Parachute drogues were set out, to depths of 300 or 800 metres, at two positions along each section and tracked for periods up to 1 1/2 days at each position. Surface drogues were tracked simultaneously. At a position close to the banks, in a band of cold water the drogues moved to the northwest. Further south, in warm water, movement was to the southeast. A slow erratic movement with little net drift was observed near the continental shelf along the Halifax section, while further south on this line the movement was southwest.

BATHYTHERMOGRAPH DATA

BT observations to maximum depths of 275 metres were taken at each station prior to the bottle casts.

BT records were processed at the Bedford Institute of Oceanography.

PERSONNEL

At Sea:

C.R. Mann	Scientist-in-Charge
T.R. Foote	
M.E. MacLean	
J.R. Chevrier	
R. Bailey	
R. Chui	
J. Medd	
J. Cuttler	

Data Analyses:

Compilation of Data:	T.R. Foote
Salinity determination:	T.R. Foote
BT Processing:	T.A. Grant D.M. MacDonald

SECTION II

Description of the machine-generated data record

SEE SECTION II OF PART I

SECTION I I I

Serial Oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Bedford Institute of Oceanography
<u>Observation Platform:</u>	CNAV "Sackville"
<u>Vessel's cruising speed:</u>	11 knots
<u>Total number of stations occupied:</u>	53
<u>Anemometer height above sea level:</u>	11 metres
<u>Barometer readings</u>	Aneroid barometer (corrected)
<u>Air temperature</u>	Sling psychrometer
<u>Wet bulb temperature</u>	Sling psychrometer
<u>Surface sea water temperature</u>	Bucket sample - deck thermometer

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature:	0.02
Salinity:	0.004

C-REF-NO 361 YR 1962 DEPTH 120 WAVES 1 18X1 AIR T 15.8 VIS
 CONS. NO 001 MONTH 7 MXSAMPD 01 WAVES 2 18XX WET B 15.0 STN 001
 LAT 44-160N DAY 23 NO.DPTH 8 WND-DIR 180 WW-CODE
 LON 63-190W HR 20.7 W-COLOR WND-SPD 04 CLD-TPE
 MARSD SQ 151 C/I 1810 W-TRNSP BARO 1014. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
207	0000	133				
207	0010	1237	30240		2286	14929
207	0020	1280	31439	640	2370	14961
207	0030	0725	32043		2508	14766
207	0050	0208	32186	719	2574	14556
207	0075	0323	32910		2622	14620
207	0100	0484	33435	498	2648	14699
207	0120	0543	33644	460	2657	14729

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1330	2864 I		2145	14940	0000	00000	6360
0010	1237	30240		2286	14929	0057	00003	5014
0020	1280	31439		2370	14961	0103	00009	4210
0030	0725	32043		2508	14766	0139	00018	2893
0050	0208	32186		2574	14556	0191	00039	2266
0075	0323	32910		2622	14620	0242	00071	1810
0100	0484	33435		2648	14699	0285	00109	1574

C-REF-NO 361 YR 1962 DEPTH 240 WAVES 1 18X1 AIR T 15.8 VIS
 CONS. NO 002 MONTH 7 MXSAMPD 02 WAVES 2 18XX WET B 14.9 STN 002
 LAT 43-531N DAY 24 NO.DPTH 10 WND-DIR 170 WW-CODE
 LON 62-531W HR 00.4 W-COLOR WND-SPD 03 CLD-TPE
 MARSD SQ 151 C/I 1810 W-TRNSP BARO 1014. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
004	0000	153				
004	0010	1412	30813		2296	14996
004	0020	0717	30790	490	2411	14745
004	0030	0406	31985		2541	14635
004	0050	0146	32257	692	2584	14529
004	0075	0324	32951		2625	14621
004	0100	0590	33815	453	2665	14747
004	0150	0766	34443	405	2691	14834
004	0201	0763	34557	425	2700	14842
004	0226	0762	34622	339	2705	14847

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1530	3049 I		2246	15028	0000	00000	5388
0010	1412	30813		2296	14996	0052	00003	4918
0020	0717	30790		2411	14745	0096	00009	3817
0030	0406	31985		2541	14635	0128	00017	2580
0050	0146	32257		2584	14529	0176	00036	2170
0075	0324	32951		2625	14621	0225	00067	1780
0100	0590	33815		2665	14747	0265	00103	1410
0125	0719 F	3425 I		2683	14809	0299	00141	1252
0150	0766	34443		2691	14833	0330	00184	1180
0175	0776 D	3453 F		2696	14843	0359	00233	1134
0200	0764	34557		2700	14842	0387	00287	1101
0225	0763	34623		2705	14847	0414	00346	1056

C-REF-NO 361 YR 1962 DEPTH 73 WAVES 1 16X2 AIR T 15.3 VIS
 CONS. NO 003 MONTH 7 MXSAMPD 01 WAVES 2 16XX WET B 14.6 STN 003
 LAT 43-290N DAY 24 NO.DPTH 6 WND-DIR 160 WW-CODE
 LON 62-272W HR 03.8 W-COLOR WND-SPD 08 CLD-TPE
 MARSD SQ 151 C/I 1810 W-TRNSP BARO 1014. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
038	0000	146	31350		2327	15016
038	0010	1383	31452		2351	14994
038	0020	0927	32098	702	2483	14843
038	0030	0630	32388		2548	14733
038	0050	0422	32786	688	2603	14656
038	0070	0443	33226	564	2635	14674

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1460	31350		2327	15016	0000	00000	4616
0010	1383	31452		2351	14994	0045	00002	4392
0020	0927	32098		2483	14843	0083	00008	3133
0030	0630	32388		2548	14733	0111	00015	2516
0050	0422	32786		2603	14656	0157	00033	1993

C-REF-NO 361	YR 1962	DEPTH	90	WAVES 1 13X2	AIR T	VIS
CONS. NO 004	MONTH 7	MXSAMPD	01	WAVES 2 16XX	WET B	STN 004
LAT 43-094N	DAY 24	NO.DPTH	6	WND-DIR 130	WW-CODE	
LON 62-060W	HR 06.8	W-COLOR		WND-SPD 05	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP		BARO 1012.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
068	0000	126	31846		2405	14956
068	0010	1192	31817		2416	14934
068	0020	1022	31958	678	2457	14876
068	0030	0626	32300		2541	14730
068	0050	0444	32634	714	2588	14663
068	0079	0505	33470	620	2648	14705

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1260	31846		2405	14956	0000	00000	3870
0010	1192	31817		2416	14934	0038	00002	3772
0020	1022	31958		2457	14876	0074	00007	3384
0030	0626	32300		2541	14730	0104	00015	2578
0050	0444	32634		2588	14663	0152	00034	2129
0075	0431 I	3338 E		2649	14672	0198	00063	1561

C-REF-NO 361	YR 1962	DEPTH 914	WAVES 1 13X1	AIR T 15.6	VIS
CONS. NO 005	MONTH 7	MXSAMPD 08	WAVES 2 18XX	WET B 15.6	STN 005
LAT 42-504N	DAY 24	NO.DPTH 15	WND-DIR 140	WW-CODE	
LON 61-564W	HR 09.6	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1009.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
096	0000	142	31954		2382	15011
096	0008	1401	31936		2384	15006
096	0029	0890	32652	518	2532	14838
096	0074	0799	34191		2666	14830
096	0100	0991	34862	541	2688	14915
096	0151	0929	34963	414	2706	14902
096	0206	0858	35010	370	2721	14885
096	0259	0730	34939	394	2735	14844
096	0312	0635	34905	433	2745	14815
096	0431	0505	34898	508	2761	14782
096	0472	0498	34917	520	2763	14786
096	0561	0466	34935	561	2768	14788
096	0651	0446	34937		2771	14794
096	0741	0429	34939	589	2773	14802
096	0834	0418	34938	597	2774	14813

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1420	31954		2382	15011	0000	00000	4094
0010	1360 G	3198 D		2396	14993	0040	00002	3961
0020	1132 I	3228 I		2462	14920	0077	00008	3329
0030	0878 B	32689		2537	14834	0107	00015	2623
0050	0729 I	3340 E		2614	14789	0152	00033	1889
0075	0806	34222		2667	14834	0194	00058	1388
0100	0991	34862		2688	14915	0226	00087	1203
0125	0997 I	3502 I		2699	14924	0255	00121	1106
0150	0933	3497 B		2706	14904	0282	00159	1041
0175	0902	34995		2713	14896	0308	00201	0979
0200	0867	35009		2720	14888	0332	00247	0919
0225	0814 B	3499 B		2726	14871	0354	00296	0858
0250	0753	34954		2733	14851	0375	00347	0800
0300	0654	34910		2743	14821	0413	00454	0704
0400	0525	34891		2758	14785	0477	00681	0568
0500	0489	34925		2765	14787	0532	00931	0509
0600	0456	34937		2770	14790	0581	01211	0474
0700	0436	34938		2772	14798	0629	01526	0459
0800	0422	34938		2774	14809	0675	01881	0452

C-REF-NO 361	YR 1962	DEPTH 2104	WAVES 1 20X2	AIR T 18.2	VIS
CONS. NO 006	MONTH 7	MXSAMPD 17	WAVES 2 20XX	WET B 17.2	STN 006
LAT 42-345N	DAY 24	NO.DPTH 18	WND-DIR 180	WW-CODE	
LON 61-460W	HR 13.6	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1008.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
136	0000	173	32725		2372	15117
136	0007	1731	32728		2372	15119
136	0026	1818	34724	589	2504	15171
136	0060	1494	35600		2647	15089
136	0082	1460	35722	412	2663	15084
136	0122	1317	35531	452	2679	15041
136	0166	1161	35315	415	2693	14992
136	0207	1003	35150	380	2708	14941
136	0253	0880	35023	373	2719	14901
136	0343	0660	34902	418	2742	14830
136	0382	0680	34998	416	2747	14845
136	0460	0535	34911	485	2758	14799
136	0557	0477	34925		2766	14791
136	0637	0469	34953	545	2769	14802
136	0796		34944	586		
136	0973	0409	34959	604	2777	14833
136	1242	0387	34952	608	2778	14868
136	1749	0362	34949	631	2781	14943

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1730	32725		2372	15117	0000	00000	4185
0010	1747 D	3298 I		2388	15127	0041	00002	4039
0020	1794 F	3400 I		2454	15155	0079	00008	3414
0030	1787 H	3494 I		2527	15165	0110	00015	2715
0050	1604 I	3557 I		2619	15121	0156	00033	1851
0075	1465 C	3571 B		2661	15084	0197	00059	1456
0100	1402 B	3567 F		2672	15067	0233	00091	1364
0125	1307	35516		2680	15038	0266	00130	1294
0150	1218	35392		2688	15011	0298	00174	1224
0175	1125	35275		2696	14981	0328	00224	1145
0200	1029	35175		2706	14949	0355	00277	1058
0225	0951	35094		2713	14924	0381	00334	0994
0250	0887	35030		2718	14904	0406	00393	0945
0300	0740 G	3492 C		2732	14854	0450	00518	0816
0400	0654 E	3499 D		2750	14838	0525	00781	0659
0500	0500 B	34907		2762	14791	0585	01057	0536
0600	0471	34940		2768	14796	0637	01349	0488
0700	0458 B	34953		2771	14808	0685	01674	0474

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0440 B	34944		2772	14817	0733	02042	0470
1000	0406	34959		2777	14836	0825	02890	0437
1200	0389	34954		2778	14863	0914	03896	0439
1500	0366	34959		2781	14903	1046	05739	0432

C-REF-NO 361	YR 1962	DEPTH 3017	WAVES 1 20X3	AIR T	VIS
CONS. NO 007	MONTH 7	MXSAMPD 14	WAVES 2 20XX	WET B	STN 007
LAT 42-163N	DAY 24	NO.DPTH 17	WND-DIR -190	WW-CODE	
LON 61-333W	HR 18.6	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1008.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
186	0000	178	32852		2370	15133
186	0004	1790	33026		2381	15139
186	0011	1993	35338	471	2506	15225
186	0033	1379	35357		2652	15045
186	0046	1372	35373	404	2655	15045
186	0080	1388	35690	372	2676	15060
186	0148	1352	35678	378	2683	15059
186	0208	1262	35562	369	2692	15037
186	0253	1059	35340	285	2713	14971
186	0422	0697	35002	350	2745	14859
186	0485	0620	35009	398	2755	14839
186	0541	0544	34969		2762	14817
186	0602	0516	34977	449	2766	14816
186	0721	0469	34980	484	2772	14816
186	0840	0444	34975		2774	14825
186	1020	0409	34959	520	2777	14841
186	1423	0385	34954	530	2779	14898

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1780	32852		2370	15133	0000	00000	4207
0010	1963 D	3496 I		2485	15212	0037	00002	3112
0020	1811 I	3601 I		2604	15183	0062	00005	1989
0030	1496 I	3568 I		2652	15086	0080	00010	1531
0050	1373	3541 C		2657	15046	0111	00022	1485
0075	1385	3564 C		2673	15057	0146	00045	1345
0100	1386	3574 F		2680	15063	0179	00074	1281
0125	1373	3574 G		2683	15063	0211	00111	1263
0150	1351	35677		2683	15059	0243	00156	1271
0175	1328 C	35645		2685	15055	0275	00209	1255
*0200	1282 B	35586		2690	15043	0306	00269	1214
0225	1190 C	3548 B		2700	15014	0336	00334	1123
0250	1074	35356		2712	14976	0363	00399	1014
0300	0915 G	3518 B		2725	14924	0411	00534	0888
0400	0720 D	3501 B		2742	14864	0493	00825	0737
0500	0598	34998		2758	14832	0560	01132	0593
0600	0516	34976		2766	14816	0616	01447	0518
0700	0476	34980		2771	14816	0666	01782	0476
0800	0451	34977		2773	14822	0713	02147	0459

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
1000	0412	34961		2776	14839	0805	02992	0444
1200	0393	34957		2778	14864	0894	04007	0441

.C-REF-NO 361	YR 1962	DEPTH 3658	WAVES 1 20X3	AIR T	VIS
CONS. NO 008	MONTH 7	MXSAMPD 22	WAVES 2 20XX	WET B	STN 008
LAT 41-575N	DAY 25	NO.DPTH 18	WND-DIR 200	WW-CODE	
LON 61-291W	HR 00.6	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1008.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
006	0000	196	33783		2396	15196
006	0010	2000	34472		2438	15217
006	0030	1866	35618	565	2560	15196
006	0075	1522	35735		2651	15102
006	0100	1447	35710	443	2665	15082
006	0150	1332	35612	438	2682	15052
006	0200	1240	35518	386	2693	15028
006	0250	1110	35350	345	2705	14989
006	0300	0971	35222	334	2719	14945
006	0400	0754	35074	379	2742	14878
006	0514	0557	34996	488	2762	14818
006	0622	0493	34991	534	2770	14810
006	0730	0446	34967		2773	14808
006	0852	0422	34949	597	2774	14818
006	1079	0397	34953	608	2777	14845
006	1312	0382	34955	620	2779	14878
006	1650	0368	34959	671	2781	14929
006	2228	0336	34959	615	2784	15014

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1960	33783		2396	15196	0000	00000	3958
0010	2000	34472		2438	15217	0038	00002	3561
0020	1952 F	3511 D		2499	15212	0071	00007	2985
0030	1866	35618		2560	15196	0098	00014	2408
0050	1700 G	3589 I		2622	15155	0140	00030	1827
0075	1522	35735		2651	15102	0183	00057	1558
0100	1447	35710		2665	15082	0221	00091	1426
0125	1385	35665		2675	15066	0255	00131	1340
0150	1332	35612		2682	15052	0289	00177	1280
0175	1287 B	35569		2688	15040	0320	00230	1230
0200	1240	35518		2693	15028	0351	00289	1185
0225	1178	35436		2699	15009	0380	00352	1136
0250	1110	35350		2705	14989	0408	00420	1082
0300	0971	35222		2719	14945	0459	00564	0948
0400	0754	35074		2742	14878	0544	00865	0739
0500	0576	35001		2760	14824	0610	01164	0563
0600	0501 B	34990		2769	14809	0663	01463	0488
0700	0457	34974		2773	14808	0711	01781	0457

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0430	34955		2774	14813	0757	02135	0449
1000	0404	34949		2776	14835	0847	02970	0442
1200	0388	34954		2778	14862	0936	03979	0437
1500	0374	34957		2780	14906	1070	05845	0443
2000	0347	34959		2783	14980	1296	09930	0447

C-REF-NO 361	YR 1962	DEPTH 3840	WAVES 1 25X3	AIR T 18.1	VIS
CONS. NO 009	MONTH 7	MXSAMPD 21	WAVES 2 25XX	WET B 16.7	STN 009
LAT 41-385N	DAY 25	NO.DPTH 18	WND-DIR 250	WW-CODE	
LON 61-185W	HR 04.8	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1010.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
048	0000	189	33760		2412	15176
048	0010	1949	34129		2425	15199
048	0028	2089	35710	501	2508	15258
048	0071	1613	35797		2635	15130
048	0095	1568	35813	462	2646	15121
048	0142	1459	35743	441	2665	15093
048	0188	1357	35628	415	2678	15066
048	0235	1288	35537	405	2685	15050
048	0280	1142	35407	348	2703	15006
048	0371	0928	35187	327	2724	14941
048	0503	0657	35042	433	2753	14857
048	0606	0546	35000	493	2764	14829
048	0707	0505	35006		2770	14829
048	0810	0472	35015		2774	14833
048	1015	0437	35005	559	2777	14852
048	1221	0406	34980	575	2779	14873
048	1535	0380	34967	586	2780	14915
048	2068	0349	34965	617	2783	14992

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1890	33760		2412	15176	0000	00000	3805
0010	1949	34129		2425	15199	0038	00002	3684
0020	2036 E	3499 I		2468	15234	0073	00007	3281
0030	2074 F	3577 I		2517	15255	0103	00015	2815
0050	1885 I	3608 I		2591	15210	0153	00035	2124
0075	1600 B	35802		2638	15127	0201	00065	1678
0100	1557	35810		2649	15118	0242	00101	1586
0125	1500	35779		2659	15104	0281	00146	1494
0150	1440	35724		2668	15088	0317	00197	1416
0175	1384	35662		2675	15073	0352	00256	1355
0200	1342 B	35606		2679	15063	0386	00320	1318
0225	1305 B	35557		2683	15054	0419	00392	1288
0250	1242 B	35495		2691	15036	0450	00469	1219
0300	1089 B	35352		2709	14990	0508	00630	1056
0400	0860 B	35142		2731	14920	0604	00970	0849
0500	0662	35044		2753	14858	0679	01314	0647
0600	0550	35001		2764	14830	0740	01651	0543
0700	0507	35005		2769	14828	0792	02001	0496

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0475	35014		2774	14832	0841	02374	0461
1000	0439	35007		2777	14850	0932	03220	0443
1200	0409	34983		2778	14871	1022	04236	0442
1500	0382	34967		2780	14910	1157	06118	0446
2000	0350	34962		2783	14981	1385	10229	0449

C-REF-NO 361	YR 1962	DEPTH 4206	WAVES 1 30X3	AIR T 17.9	VIS
CONS. NO 010	MONTH 7	MXSAMPD 15	WAVES 2 30XX	WET B 16.6	STN 010
LAT 41-204N	DAY 25	NO.DPTH 16	WND-DIR 300	WW-CODE	
LON 61-075W	HR 09.4	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1013.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
094	0000	203	34892		2462	15228
094	0008	2030	34913		2464	15230
094	0025	2038	35553	528	2510	15242
094	0061	1599	35631		2625	15123
094	0082	1577				
094	0123	1515	35867	460	2662	15109
094	0164	1416	35769	424	2676	15083
094	0205	1273	35621	367	2695	15041
094	0317	1057	35335	311	2713	14981
094	0388	0739	35064	384	2743	14870
094	0460	0725	35052		2744	14877
094	0532	0625	35029	446	2756	14849
094	0669	0507	35004	527	2769	14823
094	0815	0466	35001	559	2774	14831
094	1055	0408	34954	605	2776	14846
094	1510	0380	34955	628	2779	14911

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2030	34892		2462	15228	0000	00000	3329
0010	2034 B	3498 E		2467	15232	0033	00002	3282
0020	2042 C	3534 I		2493	15240	0065	00007	3041
0030	1980 I	3561 I		2530	15228	0094	00014	2692
0050	1739 I	3570 I		2597	15164	0142	00033	2059
0075	1575 C	3570 D		2636	15118	0189	00062	1698
0100	1554	3580 F		2649	15117	0230	00099	1587
0125	1511	35865		2663	15109	0269	00143	1455
0150	1454	3582 B		2672	15094	0304	00194	1379
0175	1378 B	35731		2682	15072	0338	00250	1293
0200	1291	35640		2692	15046	0369	00310	1193
0225	1238 G	3557 B		2698	15032	0399	00374	1150
0250	1192 I	3551 D		2702	15019	0427	00444	1116
*0300	1093 G	3538 B		2710	14991	0482	00597	1042
0400	0729 E	3505 B		2744	14868	0571	00908	0718
0500	0673 B	35039		2751	14863	0640	01230	0665
0600	0556	35014		2764	14832	0701	01571	0540
0700	0494	35003		2771	14823	0753	01915	0482
0800	0468	35001		2773	14829	0801	02283	0462
1000	0419	34966		2776	14842	0893	03136	0449

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
1200	0392 B	3497 C		2779	14864	0983	04149	0435
1500	0380	34955		2779	14909	1118	06032	0452

C-REF-NO 361	YR 1962	DEPTH 4114	WAVES 1 30X3	AIR T 17.9	VIS
CONS. NO 011	MONTH 7	MXSAMPD 21	WAVES 2 30XX	WET B 16.6	STN 011
LAT 41-020N	DAY 25	NO.DPTH 18	WND-DIR 300	WW-CODE	
LON 61-015W	HR 13.9	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1017.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
139	0000	206	35026		2464	15238
139	0008	2075	34972		2456	15243
139	0030	2079	35521	533	2497	15254
139	0078	1535	35587		2636	15105
139	0104	1450	35579	463	2654	15082
139	0157	1363	35584	460	2673	15063
139	0210	1301	35557	394	2684	15050
139	0264		35466	372		
139	0320	1052	35331	446	2714	14979
139	0432	0827	35112	345	2734	14912
139	0440	0833	35107	347	2733	14916
139	0533	0651	35041	420	2754	14859
139	0633	0552	35010		2764	14836
139	0733	0480	34985	532	2771	14823
139	0937	0445	34994	564	2775	14842
139	1155	0410	34963	580	2777	14864
139	1510	0381	34961	588	2780	14911
139	2132	0341	34961	610	2784	15000

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2060	35026		2464	15238	0000	00000	3308
0010	2080	3501 E		2457	15245	0034	00002	3376
0020	2090 B	3523 I		2471	15252	0067	00007	3247
0030	2079	35521		2497	15254	0098	00015	3010
0050	1868 I	3565 I		2562	15200	0153	00036	2397
0075	1573 F	3561 D		2629	15116	0205	00069	1760
0100	1457 B	35581		2653	15084	0247	00106	1542
0125	1407 B	35581		2664	15072	0284	00149	1446
0150	1370	35583		2672	15064	0320	00199	1378
0175	1343	35580		2677	15059	0354	00256	1332
0200	1313	35566		2682	15053	0387	00320	1291
0225	1271 B	35537		2688	15043	0419	00389	1237
0250	1218 D	35495		2696	15028	0449	00463	1174
0300	1102 C	35381		2709	14995	0506	00621	1058
0400	0898 C	35162		2727	14934	0604	00971	0895
0500	0711 B	35052		2746	14878	0685	01341	0710
0600	0578 B	35018		2762	14841	0750	01702	0566
0700	0500	34992		2769	14826	0803	02060	0498

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0460 C	34986		2773	14826	0852	02434	0464
1000	0434	34986		2776	14848	0945	03292	0452
1200	0405	34961		2777	14869	1036	04332	0454
1500	0382	34961		2780	14910	1174	06246	0451
2000	0344	34953		2783	14979	1402	10364	0448

C-REF-NO 361	YR 1962	DEPTH 4389	WAVES 1 29X2	AIR T 17.9	VIS
CONS. NO 012	MONTH 7	MXSAMPD 21	WAVES 2 32XX	WET B 17.1	STN 012
LAT 40-420N	DAY 25	NO.DPTH 18	WND-DIR 290	WW-CODE	
LON 60-500W	HR 18.1	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
181	0000	214	35098		2448	15260
181	0010	2132	35081		2449	15259
181	0030	2125	35767	523	2503	15269
181	0075	1726	36046		2627	15168
181	0100	1637	36035	455	2647	15145
181	0150	1464	35759	462	2665	15096
181	0200	1361	35644	462	2678	15070
181	0250	1297	35565	440	2685	15056
181	0300	1227	35526	373	2696	15040
181	0394	0946	35187	334	2721	14951
181	0494	0770	35056	373	2738	14900
181	0602	0624	35028	445	2756	14860
181	0710	0511	34980		2767	14832
181	0818	0478	34998	552	2772	14836
181	1024	0439	34990	574	2776	14854
181	1231	0403	34973	598	2778	14874
181	1548	0378	34964	607	2780	14916
181	2065	0344	34966	609	2784	14989

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2140	35098		2448	15260	0000	00000	3463
0010	2132	35081		2449	15259	0035	00002	3458
0020	2134 C	3539 I		2471	15265	0068	00007	3248
0030	2125	35767		2503	15269	0000	00015	2951
0050	1961 I	3602 I		2566	15231	0153	00036	2356
0075	1726	36046		2627	15168	0205	00069	1783
0100	1637	36035		2647	15145	0248	00106	1598
0125	1546 B	3591 E		2659	15120	0287	00151	1498
0150	1464	35759		2665	15096	0324	00203	1441
0175	1406	3569 B		2672	15081	0359	00263	1379
0200	1361	35644		2678	15070	0393	00328	1329
0225	1327	35600		2682	15062	0427	00400	1300
0250	1297	35565		2685	15056	0459	00479	1274
0300	1227	35526		2696	15040	0521	00654	1181
0400	0933	35174		2722	14947	0628	01033	0942
0500	0761	35053		2739	14897	0715	01431	0781
0600	0626	35028		2756	14861	0786	01828	0624
0700	0519	34983		2766	14833	0844	02215	0528

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0480	34993		2771	14834	0895	02609	0483
1000	0443	34993		2776	14852	0991	03489	0458
1200	0408	34976		2778	14870	1082	04525	0446
1500	0381	34964		2780	14909	1218	06416	0447
2000	0345	34964		2783	14979	1444	10483	0441

C-REF-NO 361	YR 1962	DEPTH 4023	WAVES 1 34X1	AIR T 19.6	VIS
CONS. NO 013	MONTH 7	MXSAMPD 25	WAVES 2 22XX	WET B 19.3	STN 013
LAT 40-237N	DAY 25	NO.DPTH 19	WND-DIR 340	WW-CODE	
LON 60-426W	HR 22.0	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
220	0000	215	35379		2466	15266
220	0010	2192	35363		2454	15278
220	0030	2178	35577	507	2474	15280
220	0075	1660	35899		2632	15147
220	0100	1506	35701	450	2652	15101
220	0150	1376	35590	451	2671	15066
220	0200	1315	35592	432	2684	15054
220	0250	1290	35647	373	2693	15054
220	0300	1116	35389	338	2707	15000
220	0400	0881	35153	337	2729	14928
220	0491	0743	35067	380	2743	14889
220	0589	0591	35008	459	2759	14844
220	0689	0512	35010		2769	14829
220	0788	0484	35009	472	2772	14834
220	0986	0472	34994	569	2772	14862
220	1184	0405	34968	588	2778	14866
220	1483	0382	34965	578	2780	14907
220	1977	0350	34970	586	2783	14977
220	2462	0312	34956	606	2786	15044

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2150	35379		2466	15266	0000	00000	3286
0010	2192	35363		2454	15278	0034	00002	3413
0020	2201	3545 D		2458	15283	0068	00007	3377
0030	2178	35577		2474	15280	0101	00015	3229
0050	1970 I	3579 G		2546	15231	0159	00039	2548
0075	1660	35899		2632	15147	0213	00072	1740
0100	1506	35701		2652	15101	0255	00109	1556
0125	1422 D	3562 C		2663	15077	0292	00152	1452
0150	1376	35590		2671	15066	0328	00203	1384
0175	1339	35581		2678	15058	0362	00259	1324
0200	1315	35592		2684	15054	0395	00322	1275
0225	1310 D	3564 D		2688	15057	0427	00392	1240
0250	1290	35647		2693	15054	0458	00466	1200
0300	1116	35389		2707	15000	0515	00628	1076
0400	0881	35153		2729	14928	0613	00976	0874
0500	0728	35060		2745	14884	0694	01347	0728
0600	0579	35007		2761	14841	0760	01715	0576

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0507	35010		2770	14829	0814	02074	0493
0800	0483	35008		2772	14835	0863	02452	0476
1000	0467	34992		2773	14862	0961	03359	0490
1200	0403	34967		2778	14868	1056	04429	0446
1500	0381	34965		2780	14909	1192	06318	0447
2000	0346	34965		2783	14979	1417	10387	0441
2500	0309	34955		2786	15049	1640	15551	0432

C-REF-NO 361	YR 1962	DEPTH 4481	WAVES 1 34X1	AIR T 21.1	VIS
CONS. NO 014	MONTH 7	MXSAMPD 24	WAVES 2 22XX	WET B 18.3	STN 014
LAT 40-060N	DAY 26	NO.DPTH 19	WND-OIR -	WW-CODE	
LON 60-326W	HR 02.1	W-COLOR	WND-SPD 02	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1022.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
021	0000	216	35395		2465	15269
021	0010	2189	35379		2456	15278
021	0030	2199	35620	505	2471	15286
021	0075	1591	35610		2625	15122
021	0100	1444	35479	474	2648	15078
021	0150	1385	35652	435	2674	15070
021	0200	1286	35527	430	2685	15043
021	0250	1205	35458	436	2695	15023
021	0300	1076	35326	291	2709	14985
021	0399	0876	35137	338	2728	14925
021	0476	0736	35050	378	2743	14883
021	0571	0617	35037	451	2758	14852
021	0666	0523	34998		2767	14829
021	0762	0482	34996	534	2771	14828
021	0953	0435	34984	587	2776	14841
021	1145	0405	34969	576	2778	14860
021	1439	0379	34960	606	2780	14898
021	1927	0354	34965	604	2783	14970
021	2388	0322	34956	600	2785	15035

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2160	35395		2465	15269	0000	00000	3301
0010	2189	35379		2456	15278	0034	00002	3393
0020	2209 B	3549 E		2458	15285	0068	00007	3372
0030	2199	35620		2471	15286	0101	00015	3253
0050	1955 I	3568 E		2542	15225	0160	00039	2589
0075	1591	35610		2625	15122	0215	00073	1798
0100	1444	35479		2648	15078	0258	00111	1589
0125	1397 G	3555 I		2663	15068	0296	00155	1451
0150	1385	35652		2674	15070	0331	00205	1357
0175	1337	3561 D		2680	15057	0365	00260	1302
0200	1286	35527		2685	15043	0397	00323	1266
0225	1247 B	35493		2690	15034	0428	00391	1224
0250	1205	35458		2695	15023	0459	00465	1176
0300	1076	35326		2709	14985	0515	00623	1051
0400	0874	35135		2729	14925	0612	00968	0876
0500	0702	35043		2747	14874	0692	01332	0703
0600	0584	35025		2761	14844	0756	01692	0570

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0505	34995		2769	14828	0810	02052	0501
0800	0470	34994		2773	14830	0859	02430	0470
1000	0426	34980		2776	14845	0952	03287	0447
1200	0399	34966		2778	14867	1042	04307	0442
1500	0376	34960		2780	14907	1177	06180	0443
2000	0345 B	34958		2783	14979	1402	10250	0444

C-REF-NO 361	YR 1962	DEPTH 4718	WAVES 1 11X1	AIR T	VIS
CONS. NO 015	MONTH 7	MXSAMPD 25	WAVES 2 13XX	WET B	STN 015
LAT 39-470N	DAY 26	NO.DPTH 19	WND-DIR 120	WW-CODE	
LON 60-240W	HR 06.5	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 115	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
065	0000	217	34581		2400	15262
065	0010	2173	34606		2401	15264
065	0030	2114	35854	536	2512	15267
065	0075	1457	35444		2643	15078
065	0100	1619	36090	451	2656	15141
065	0150	1492	35834	462	2665	15106
065	0200	1351	35637	444	2680	15066
065	0250	1254	35551		2693	15041
065	0300	1139	35423	337	2705	15008
065	0399	0894	35145	336	2726	14932
065	0493	0719	35049	402	2745	14880
065	0592	0594	35027	470	2760	14846
065	0690	0523	35022	527	2769	14834
065	0789	0483	35003	552	2772	14833
065	0986	0434	34982	586	2776	14846
065	1184	0407	34970	603	2778	14867
065	1482	0379	34962	615	2780	14906
065	1978	0351	34961	614	2783	14978
065	2466	0316	34952	615	2785	15046

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2170	34581		2400	15262	0000	00000	3916
0010	2173	34606		2401	15264	0039	00002	3910
0020	2158	3519 I		2450	15269	0076	00008	3455
0030	2114	35854		2512	15267	0108	00016	2860
0050	1792 I	3582 I		2594	15181	0158	00035	2090
0075	1457	35444		2643	15078	0205	00064	1634
0100	1619	36090		2656	15141	0244	00066	1518
0125	1594 I	3609 I		2661	15137	0282	00143	1472
0150	1492	35834		2665	15106	0319	00195	1445
0175	1420	35725		2672	15086	0354	00254	1381
0200	1351	35637		2680	15066	0388	00320	1314
0225	1301 B	3559 B		2687	15053	0421	00390	1256
0250	1254	35551		2693	15041	0452	00466	1201
0300	1139	35423		2705	15008	0510	00628	1093
0400	0892	35143		2726	14932	0610	00985	0898
0500	0708	35046		2746	14877	0691	01355	0710
0600	0587	35027		2761	14845	0756	01718	0571

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0518	35020		2769	14833	0810	02078	0499
0800	0479	35001		2772	14834	0860	02458	0476
1000	0432	34981		2776	14847	0954	03327	0453
1200	0405	34969		2778	14869	1045	04359	0448
1500	0378	34962		2780	14908	1181	06248	0445
2000	0345 B	34957		2783	14979	1407	10331	0445
2500	0314	34952		2785	15051	1633	15577	0442

C-REF-NO 361	YR 1962	DEPTH 4738	WAVES 1 22X1	AIR T 24.7	VIS
CONS. NO 016	MONTH 7	MXSAMPD 25	WAVES 2 22XX	WET B 22.2	STN 016
LAT 39-294N	DAY 26	NO.DPTH 19	WND-DIR 210	WW-CODE	
LON 60-170W	HR 10.4	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 115	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
104	0000	232	35513		2428	15311
104	0010	2307	35475		2429	15309
104	0030	2252	36011	509	2486	15304
104	0075	1790	36004		2608	15186
104	0100	1718	36177	349	2639	15171
104	0150	1549	35971	429	2663	15126
104	0200	1390	35700	410	2677	15080
104	0250	1269	35536		2689	15046
104	0300	1170	35470	345	2703	15019
104	0400	0899	35135	338	2724	14934
104	0500	0743	35063	358	2743	14890
104	0600	0578	34975	451	2758	14840
104	0700	0521	34989	510	2766	14834
104	0799	0484		536		
104	0999	0445	34997	575	2776	14853
104	1199	0414	34989	583	2778	14873
104	1499	0386	34973	615	2780	14911
104	1996	0354	34966	603	2783	14982
104	2483	0316	34955	610	2786	15049

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2320	35513		2428	15311	0000	00000	3648
0010	2307	35475		2429	15309	0037	00002	3644
0020	2288	3571 I		2453	15308	0072	00007	3423
0030	2252	36011		2486	15304	0105	00016	3114
0050	2049 I	3609 I		2548	15256	0162	00038	2532
0075	1790	36004		2608	15186	0218	00074	1963
0100	1718	36177		2639	15171	0264	00114	1678
0125	1635	3612 G		2655	15150	0305	00161	1537
0150	1549	35971		2663	15126	0343	00214	1467
0175	1467	3583 B		2670	15102	0379	00274	1400
0200	1390	35700		2677	15080	0413	00341	1346
0225	1326	35605		2683	15062	0447	00413	1294
0250	1269	35536		2689	15046	0478	00491	1241
0300	1170	35470		2703	15019	0538	00658	1115
0400	0899	35135		2724	14934	0640	01021	0916
0500	0743	35063		2743	14890	0724	01405	0748
0600	0578	34975		2758	14840	0792	01786	0598

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0521	34989		2766	14834	0849	02164	0526
0800	0484	34996		2771	14836	0900	02558	0486
1000	0445	34997		2776	14853	0996	03439	0458
1200	0414	34989		2778	14873	1087	04473	0444
1500	0386	34973		2780	14912	1223	06361	0447
2000	0350 B	34962		2783	14981	1451	10474	0449
2500	0315	34955		2786	15052	1677	15732	0441

C-REF-NO 361	YR 1962	DEPTH 4718	WAVES 1 17X1	AIR T 24.4	VIS
CONS. NO 017	MONTH 7	MXSAMPD 25	WAVES 2 17XX	WET B 23.3	STN 017
LAT 39-115N	DAY 26	NO.DPTH 19	WND-DIR 160	WW-CODE	
LON 60-075W	HR 14.6	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 115	C/I 1810	W-TRNSP	BARO 1021.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
146	0000	238	35675		2423	15327
146	0009	2399	35724		2421	15334
146	0028	2358	35642	488	2427	15326
146	0070	1745	35624		2590	15168
146	0093	1808	36197	402	2619	15197
146	0139	1529	35761	436	2651	15115
146	0186	1327	35480	451	2673	15054
146	0235	1299	35538		2683	15054
146	0283	1215	35495	358	2696	15033
146	0382	0974	35228	326	2719	14960
146	0493		35065	361		
146	0592	0625	35025	446	2756	14859
146	0691	0505	35010	521	2770	14826
146	0790	0481	34992	544	2771	14833
146	0988	0419	34950	597	2775	14839
146	1185	0404	34963	598	2777	14866
146	1479	0386	34973	607	2780	14908
146	1969	0356	34968	608	2783	14978
146	2460	0320	34958	608	2785	15047

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2380	35675		2423	15327	0000	00000	3699
0010	2400	35722		2421	15334	0037	00002	3725
0020	2391	3569 C		2421	15333	0075	00008	3727
0030	2326 F	3562 B		2435	15318	0112	00017	3598
0050	2023 I	3553 I		2513	15242	0177	00043	2866
0075	1752 F	3575 G		2598	15172	0238	00081	2057
0100	1780 G	3619 I		2625	15190	0287	00125	1811
0125	1638 I	3600 I		2644	15149	0331	00174	1636
0150	1470 B	35673		2657	15097	0370	00230	1517
0175	1363 B	35524		2669	15065	0407	00292	1413
0200	1312 D	3548 D		2676	15052	0442	00358	1350
0225	1300 C	3552 C		2681	15052	0476	00431	1308
0250	1277	35533		2687	15049	0508	00510	1258
0300	1175 B	3545 B		2701	15021	0568	00680	1136
0400	0937	35192		2723	14949	0673	01051	0936
0500	0756 B	35060		2741	14895	0759	01444	0770
0600	0613	35023		2758	14855	0829	01834	0609

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0501	35008		2770	14826	0884	02201	0486
0800	0478	34989		2771	14833	0933	02579	0483
1000	0417	34950		2775	14841	1028	03459	0458
1200	0403	34964		2778	14868	1120	04498	0449
1500	0385	34973		2780	14911	1256	06392	0446
2000	0353	34971		2783	14982	1483	10484	0446
2500	0317	34956		2786	15052	1709	15742	0443

C-REF-NO 361	YR 1962	DEPTH 4755	WAVES 1 18X1	AIR T 24.6	VIS
CONS. NO 018	MONTH 7	MXSAMPD 25	WAVES 2 18XX	WET B 24.0	STN 018
LAT 38-495N	DAY 26	NO.DPTH 19	WND-DIR 180	WW-CODE	
LON 59-570W	HR 18.3	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 114	C/I 1810	W-TRNSP	BARO 1019.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
183	0000	242	35752		2417	15338
183	0010	2411	35744		2419	15337
183	0029	2396	35879	451	2434	15338
183	0073	1739	35672		2595	15167
183	0097	1641	35917	438	2637	15145
183	0146	1501	35804	441	2661	15108
183	0195	1406	35707	473	2674	15084
183	0244	1326	35640		2685	15065
183	0293	1252	35572	434	2695	15048
183	0392	0995	35282	339	2720	14970
183	0532	0707	35048	373	2747	14881
183	0629	0586	35005	448	2760	14849
183	0727	0511	34986	498	2767	14834
183	0825	0482	34994	538	2771	14839
183	1017	0444	34999	562	2776	14855
183	1210	0402	34964	591	2778	14870
183	1500	0380	34961	612	2780	14909
183	1984	0356	34965	596	2782	14981
183	2470	0323	34958	593	2785	15050

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2420	35752		2417	15338	0000	00000	3756
0010	2411	35744		2419	15337	0038	00002	3741
0020	2413 D	3581 D		2424	15340	0075	00008	3702
0030	2382 C	3587 B		2437	15335	0112	00017	3574
0050	2098 I	3577 I		2511	15265	0177	00043	2885
0075	1727	3569 B		2600	15164	0239	00081	2043
0100	1631	3592 B		2640	15142	0285	00123	1666
0125	1553	3590 I		2656	15122	0325	00169	1519
0150	1492	35795		2662	15106	0363	00222	1473
0175	1441	35744		2669	15093	0399	00282	1412
0200	1397	35699		2675	15082	0434	00349	1362
0225	1356	35664		2681	15072	0468	00423	1310
0250	1318	35633		2686	15064	0500	00502	1265
0300	1235	35553		2697	15043	0562	00675	1177
0400	0976	35263		2722	14964	0669	01054	0947
0500	0763	35083		2741	14898	0756	01449	0762
0600	0616	35011		2756	14856	0826	01841	0622

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0527	34989		2766	14837	0884	02229	0534
0800	0487	34991		2770	14837	0936	02629	0493
1000	0447	35000		2776	14854	1032	03518	0458
1200	0404	34966		2778	14869	1124	04558	0448
1500	0380	34961		2780	14909	1261	06456	0448
2000	0351 B	34961		2783	14982	1489	10582	0451
2500	0321	34958		2785	15054	1718	15897	0448

C-REF-NO 361	YR 1962	DEPTH 5303	WAVES 1 22X2	AIR T 24.3	VIS
CONS. NO 019	MONTH 7	MXSAMPD 24	WAVES 2 22XX	WET B 23.1	STN 019
LAT 40-000N	DAY 27	NO.DPTH 19	WND-DIR 250	WW-CODE	
LON 61-090W	HR 16.4	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1014.	CLD-AMT	HW

O B S E R V E D

	GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
	164	0000	213	34470		2403	15250
	164	0010	2092	34216		2394	15239
	164	0029	2093	34973	535	2451	15251
	164	0073	1693	36009		2632	15158
	164	0097	1623	36059	437	2653	15141
	164	0146	1490	35876	430	2669	15105
	164	0195	1380	35702	429	2679	15076
	164	0244	1282	35568		2689	15050
	164	0293	1216	35536	360	2699	15035
	164	0392	0973	35229	322	2720	14961
	164	0458	0825	35119	360	2735	14916
	164	0550	0687	35057	418	2750	14877
	164	0647	0572	35007	475	2761	14846
	164	0736	0521	35012	529	2768	14840
	164	0922	0454	35002	563	2775	14844
	164	1111	0420	34986	586	2778	14861
3	164	1397	0390	35116	531	2791	14898
	164	1880	0358	34968	597	2783	14964
	164	2370	0326	34962	608	2785	15034

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2130	34470		2403	15250	0000	00000	3891
0010	2092	34216		2394	15239	0040	00002	3980
0020	2093 D	3453 I		2417	15244	0078	00008	3763
0030	2085 B	35009		2456	15249	0114	00017	3396
0050	1915 I	3561 B		2546	15213	0174	00041	2544
0075	1685	36022		2635	15156	0228	00074	1707
0100	1614	36053		2654	15139	0268	00110	1534
0125	1545	3598 D		2664	15120	0306	00153	1445
0150	1480	35861		2670	15103	0342	00204	1401
0175	1423	35770		2675	15087	0377	00261	1355
0200	1369	35685		2680	15073	0410	00326	1315
0225	1317	35612		2685	15059	0443	00397	1273
0250	1274	35563		2690	15048	0474	00474	1230
0300	1201	3552 B		2701	15031	0534	00642	1138
0400	0954	35212		2722	14955	0639	01016	0948
0500	0755	35083		2743	14895	0725	01407	0751
0600	0622	35027		2757	14859	0794	01795	0619

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0538	35007		2766	14841	0853	02183	0534
0800	0493	35010		2771	14840	0904	02580	0487
1000	0437	34991		2776	14850	0999	03457	0452
1200	0409	3503 C		2782	14872	1087	04444	0411
1500	0382	3510 D		2790	14912	1203	06044	0351
2000	0347	3505 I		2790	14981	1389	09426	0382

C-REF-NO 361	YR 1962	DEPTH 4682	WAVES 1 18X1	AIR T 23.1	VIS
CONS. NO 020	MONTH 7	MXSAMPD 10	WAVES 2 22XX	WET B 20.0	STN 020
LAT 40-162N	DAY 29	NO.DPTH 14	WND-DIR 190	WW-CODE	
LON 60-478W	HR 14.1	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1027.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
141	0000	223	35425		2448	15287
141	0050	2023	35673	544	2523	15244
141	0099	1485	35535	472	2643	15092
141	0149	1435	35709	461	2668	15086
141	0199	1314	35567	431	2682	15053
141	0248	1251	35547	434	2693	15040
141	0298	1096	35357	327	2708	14992
141	0398	0829	35111	360	2734	14907
141	0497	0686	35045	428	2749	14867
141	0597	0569	35011	487	2762	14837
141	0697	0502	34999		2769	14826
141	0796	0476	35002	533	2773	14832
141	0896	0446	34998	560	2776	14836
141	0996	0429	34985	582	2776	14845

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2230	35425		2448	15287	0000	00000	3466
0010	2155 I	3545 E		2471	15269	0034	00002	3248
0020	2082 I	3548 I		2493	15252	0065	00006	3043
*0030	2013 I	3551 I		2513	15236	0095	00014	2851
0050	2023	35673		2523	15244	0151	00037	2764
0075	1739 I	3561 G		2590	15167	0213	00076	2132
0100	1482	35538		2644	15091	0260	00117	1624
0125	1432 I	3563 G		2662	15080	0299	00162	1465
0150	1433	35707		2668	15086	0336	00213	1414
0175	1373 C	3565 E		2676	15070	0370	00271	1343
0200	1313	35567		2682	15053	0403	00334	1290
0225	1283 C	3556 C		2688	15047	0435	00404	1243
0250	1246	35541		2694	15038	0466	00479	1192
0300	1090	35350		2709	14990	0523	00638	1058
0400	0825	35109		2734	14906	0618	00973	0820
0500	0682	35044		2750	14866	0693	01318	0674
0600	0566	35010		2762	14836	0755	01666	0556
0700	0501	34999		2769	14826	0808	02020	0493
0800	0475	35002		2773	14832	0857	02395	0470
1000	0428	34984		2776	14846	0950	03251	0446

C-REF-NO 361 YR 1962 DEPTH 4682 WAVES 1 18X1 AIR T 23.9 VIS
 CONS. NO 021 MONTH 7 MXSAMPD 00 WAVES 2 22XX WET B 19.7 STN
 LAT 40-152N DAY 29 NO.DPTH 3 WND-DIR 180 WW-CODE
 LON 60-469W HR 16.3 W-COLOR WND-SPD 02 CLD-TPE
 MARSD SQ 151 C/I 1810 W-TRNSP BARO 1028. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
163	0000	227	35566		2447	15299
163	0010	2207	35310		2445	15281
163	0050	1912	35814		2563	15215

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2270	35566		2447	15299	0000	00000	3473
0010	2207	35310		2445	15281	0035	00002	3491
0050	1912	35814		2563	15215	0153	00034	2385

C-REF-NO 361	YR 1962	DEPTH 4682	WAVES 1 18X1	AIR T 23.9	VIS
CONS. NO 022	MONTH 7	MXSAMPD 00	WAVES 2 22XX	WET B 19.7	STN 022
LAT 40-145N	DAY 29	NO.DPTH 3	WND-DIR 180	WW-CODE	
LON 60-480W	HR 18.4	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1028.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
184	0000	226	35458		2442	15295
184	0010	2188	35293		2449	15276
184	0050	1841	35813		2581	15195

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2260	35458		2442	15295	0000	00000	3523
0010	2188	35293		2449	15276	0035	00002	3453
0050	1841	35813		2581	15195	0149	00032	2214

C-REF-NO 361 YR 1962 DEPTH 4682 WAVES 1 18X1 AIR T 23.6 VIS
 CONS. NO 023 MONTH 7 MXSAMPD 00 WAVES 2 22XX WET B 20.1 STN 023
 LAT 40-152N DAY 29 NO.DPTH 3 WND-DIR 180 WW-CODE
 LON 60-490W HR 20.4 W-COLOR WND-SPD 04 CLD-TPE
 MARSD SQ 151 C/I 1810 W-TRNSP BARO 1027. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
204	0000	224	35315		2436	15288
204	0010	2203	35284		2444	15280
204	0050	1827	35803		2584	15191

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2240	35315		2436	15288	0000	00000	3573
0010	2203	35284		2444	15280	0036	00002	3499
0050	1827	35803		2584	15191	0150	00032	2188

C-REF-NO 361	YR 1962	DEPTH 4755	WAVES 1 18X1	AIR T 22.2	VIS
CONS. NO 024	MONTH 7	MXSAMPD 00	WAVES 2 22XX	WET B 20.8	STN 024
LAT 40-179N	DAY 30	NO.DPTH 3	WND-DIR 180	WW-CODE	
LON 60-522W	HR 04.2	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1027.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
042	0000	223	35337		2441	15286
042	0010	2219	35288		2440	15284
042	0050	1820	35854		2589	15189

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2230	35337		2441	15286	0000	00000	3530
0010	2219	35288		2440	15284	0036	00002	3539
0050	1820	35854		2589	15189	0150	00031	2134

C-REF-NO 361 YR 1962 DEPTH 4572 WAVES 1 18X1 AIR T 22.2 VIS
 CONS. NO 025 MONTH 7 MXSAMPD 00 WAVES 2 22XX WET B 20.2 STN 025
 LAT 40-147N DAY 30 NO.DPTH 3 WND-DIR 170 WW-CODE
 LON 60-510W HR 08.3 W-COLOR WND-SPD 05 CLD-TPE
 MARSD SQ 151 C/I 1810 W-TRNSP BARO 1026. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
083	0000	222	35455		2453	15285
083	0010	2212	35424		2453	15284
083	0050	1868	35785		2572	15202

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2220	35455		2453	15285	0000	00000	3418
0010	2212	35424		2453	15284	0034	00002	3422
0050	1868	35785		2572	15202	0149	00033	2299

C-REF-NO 361	YR 1962	DEPTH 4389	WAVES 1 14X2	AIR T 23.2	VIS
CONS. NO 026	MONTH 7	MXSAMPD 10	WAVES 2 21XX	WET B 21.2	STN 026
LAT 40-126N	DAY 30	NO.DPTH 15	WND-DIR 170	WW-CODE	
LON 60-530W	HR 17.1	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1024.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
171	0000	220	35364		2451	15279
171	0009	2197	35307		2448	15279
171	0047	1928	35861		2562	15219
171	0094	1538	35828		2654	15111
171	0141	1412	35691		2671	15077
171	0187	1309	35558		2682	15049
171	0235	1235	35465		2690	15031
171	0284	1159	35454		2704	15013
171	0376	0907	35169		2726	14934
171	0447	0773	35072		2739	14893
171	0532	0637	35022		2754	14853
171	0620	0543	35027		2767	14830
171	0710	0488	35008		2772	14822
171	0799	0460	34995		2774	14826
171	1008	0440	34989		2776	14852

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2200	35364		2451	15279	0000	00000	3430
0010	2193	3532 B		2450	15278	0035	00002	3449
0020	2143 G	3543 I		2472	15268	0068	00007	3239
*0030	2077 H	3557 I		2501	15253	0099	00015	2971
0050	1900 B	3587 B		2571	15212	0153	00036	2314
0075	1684 G	3590 G		2626	15154	0204	00068	1796
0100	1514 B	35813		2659	15105	0246	00105	1491
0125	1439 E	35743		2670	15084	0282	00147	1393
0150	1390	35663		2674	15071	0317	00196	1358
0175	1333	35591		2680	15056	0350	00251	1306
0200	1287	35526		2684	15044	0383	00314	1269
0225	1249	35479		2688	15034	0414	00383	1237
0250	1214	3546 B		2694	15026	0445	00457	1190
0300	1117 C	3541 C		2708	15000	0502	00617	1062
0400	0858	35127		2730	14919	0598	00960	0856
0500	0684	35033		2749	14867	0676	01315	0685
0600	0561	35024		2764	14834	0738	01661	0539
0700	0492	35011		2771	14823	0789	02001	0474
0800	0456 B	34995		2774	14824	0836	02362	0451
1000	0439	34989		2776	14850	0928	03214	0456

C-REF-NO 361	YR 1962	DEPTH 4846	WAVES 1 20X2	AIR T 25.4	VIS
CONS. NO 027	MONTH 8	MXSAMPD 26	WAVES 2 20XX	WET B 23.2	STN 027
LAT 40-300N	DAY 01	NO.DPTH 19	WND-DIR 210	WW-CODE	
LON 52-590W	HR 06.8	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1021.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
068	0000	233	35757		2444	15316
068	0009	2329	35606		2433	15315
068	0029	2313	35631	519	2439	15315
068	0077	1638	35740		2625	15138
068	0105	1729	36284	460	2645	15177
068	0157	1487	35792	469	2663	15105
068	0211	1384	35653	469	2674	15079
068	0265	1319	35621		2685	15066
068	0320	1229	35576	380	2700	15044
068	0428	0952	35167	360	2718	14959
068	0572	0652	34916	441	2744	14865
068	0677	0612	35035	473	2759	14868
068	0775	0539	35013	518	2766	14854
068	0872	0475	34974	566	2770	14844
068	1064	0448	34990	591	2775	14865
068	1269	0416	34981	609	2778	14885
068	1568	0381	34959	635	2779	14921
068	2086	0357	34974	628	2783	14999
068	2620	0319		633		

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2330	35757		2444	15316	0000	00000	3500
0010	2330	35601		2432	15316	0036	00002	3617
0020	2331 C	3559 E		2431	15317	0072	00007	3632
0030	2298 C	35628		2443	15311	0108	00017	3517
0050	2008 I	3561 I		2522	15239	0171	00042	2772
*0075	1665 G	3572 B		2617	15146	0230	00078	1877
0100	1705 F	3620 F		2644	15168	0274	00117	1636
0125	1659 I	3619 I		2654	15158	0314	00163	1544
0150	1531 G	3591 I		2662	15119	0352	00217	1476
0175	1442 B	3572 C		2667	15093	0389	00278	1432
0200	1397 B	3566 B		2672	15082	0424	00346	1389
0225	1366	35640		2677	15076	0459	00421	1349
0250	1336	35625		2682	15070	0492	00503	1307
0300	1265	35599		2694	15054	0556	00681	1200
0400	1028 C	3528 E		2714	14983	0668	01079	1021
0500	0779 D	3499 B		2732	14903	0762	01513	0855
0600	0636 C	3494 C		2748	14863	0841	01953	0700

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0596	35036		2761	14865	0906	02386	0590
0800	0520	35002		2767	14851	0963	02821	0528
1000	0450 C	3498 B		2774	14855	1065	03758	0477
1200	0427	34986		2777	14878	1160	04835	0463
1500	0388	34963		2779	14912	1300	06780	0457
2000	0360	34970		2783	14985	1532	10967	0456
2500	0324							

C-REF-NO 361 YR 1962 DEPTH 4755 WAVES 1 20X2 AIR T 23.9 VIS
 CONS. NO 028 MONTH 8 MXSAMPD 16 WAVES 2 21XX WET B 22.2 STN 028
 LAT 40-570N DAY 01 NO.DPTH 19 WND-DIR 210 WW-CODE
 LON 52-450W HR 11.8 W-COLOR WND-SPD 08 CLD-TPE
 MARSD SQ 150 C/I 1810 W-TRNSP BARO 1020. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
118	0000	231	35358		2420	15306
118	0010	2309	35350		2419	15308
118	0035	2143	35846	523	2504	15275
118	0079	1737	35933		2616	15171
118	0111	1536	35748	464	2649	15113
118	0165	1344	35470	479	2668	15056
118	0221	1327	35587	436	2681	15061
118	0277	1268	35543		2690	15050
118	0334	1167	35453	363	2702	15024
118	0395	1025	35168	344	2706	14980
118	0452	0922	35288	314	2733	14953
118	0464	0874	35121	345	2727	14935
118	0531	0744	35010	383	2738	14895
118	0600	0683	35046	420	2750	14883
118	0731	0498	34937	523	2765	14829
118	0863	0468				
118	1022	0447	34996	569	2775	14857
118	1278	0407	34975	604	2778	14883
118	1580	0381	34966	605	2780	14923

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2310	35358		2420	15306	0000	00000	3732
0010	2309	35350		2419	15308	0038	00002	3739
0020	2259 D	3552 I		2447	15299	0074	00007	3482
0030	2187 C	3573 G		2483	15284	0107	00016	3143
0050	2004 F	3595 F		2550	15242	0164	00039	2513
0075	1774 B	3595 B		2608	15181	0220	00074	1961
0100	1597	3582 B		2640	15131	0266	00114	1664
0125	1469	3566 C		2656	15093	0306	00160	1519
0150	1379	3553 C		2665	15066	0343	00213	1438
0175	1336 C	3548 D		2671	15055	0379	00272	1390
0200	1325 E	3553 F		2677	15056	0413	00338	1342
0225	1324	35587		2682	15061	0447	00411	1304
0250	1302	35577		2685	15057	0479	00490	1274
0300	1232	35520		2695	15041	0541	00665	1194
0400	1020 B	3520 F		2709	14979	0656	01072	1067
0500	0810 C	3513 I		2738	14917	0750	01502	0803
0600	0683	35046		2750	14883	0825	01926	0690

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0539 D	3497 C		2763	14841	0889	02346	0564
0800	0472 C	3494 D		2768	14830	0943	02766	0515
1000	0450	3499 B		2774	14855	1043	03686	0472
1200	0419	34984		2778	14875	1137	04746	0454
1500	0388	34976		2780	14913	1274	06654	0448

C-REF-NO 361	YR 1962	DEPTH 4755	WAVES 1 22X2	AIR T	VIS
CONS. NO 029	MONTH 8	MXSAMP 20	WAVES 2 22XX	WET B	STN 029
LAT 41-160N	DAY 01	NO.DPTH 18	WND-DIR 220	WW-CODE	
LON 52-290W	HR 15.6	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
156	0000	208				
156	0007	2118	34314		2394	15246
156	0022	2115	35670	544	2498	15264
156	0062	1639	35839		2632	15137
156	0083	1677	36143	463	2646	15156
156	0127	1578	36010	468	2659	15132
156	0171	1357	35656	446	2680	15064
156	0217	1448	35968		2685	15105
156	0362	1127	35389	338	2705	15014
156	0413	1019	35278	326	2716	14982
156	0485	0847	35099	355	2730	14928
156	0559	0722				
156	0614	0660	35049	432	2753	14876
156	0750	0532	35001	512	2766	14847
156	0899	0474	34993	557	2772	14848
156	1121	0431	34987	589	2776	14867
156	1520	0389	34967	616	2779	14916
156	1991	0356	34961	629	2782	14982

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2080	3378 I		2364	15229	0000	00000	4263
0010	2126	3452 I		2408	15251	0041	00002	3845
0020	2121	3514 I		2456	15259	0077	00007	3389
0030	2018 I	3588 I		2540	15242	0107	00015	2593
0050	1780 I	3602 I		2612	15180	0153	00033	1916
0075	1654 E	3603 D		2643	15146	0197	00061	1630
0100	1660 C	3617 H		2652	15154	0237	00097	1554
0125	1586	3603 B		2659	15134	0276	00141	1498
0150	1451 I	3580 I		2671	15093	0312	00192	1385
0175	1360 C	3567 C		2681	15066	0346	00248	1298
0200	1401 H	3583 I		2684	15085	0378	00311	1276
0225	1442 D	3596 F		2686	15104	0410	00381	1270
0250	1415 I	3592 I		2689	15099	0442	00458	1248
*0300	1319 I	3576 I		2696	15074	0504	00632	1191
0400	1047	35305		2713	14990	0616	01032	1039
0500	0818	3508 B		2733	14919	0711	01467	0845
0600	0674	3505 B		2751	14880	0788	01897	0677
0700	0573	35016		2762	14855	0851	02318	0574

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0506	34996		2769	14845	0906	02741	0515
1000	0450	34990		2775	14855	1006	03659	0470
1200	0420	34983		2777	14876	1100	04722	0457
1500	0390	34968		2779	14914	1239	06656	0457
2000	0356	34961		2782	14983	1471	10851	0458

C-REF-NO 361	YR 1962	DEPTH 4663	WAVES 1 22X2	AIR T 21.0	VIS
CONS. NO 030	MONTH 8	MXSAMPD 25	WAVES 2 22XX	WET B 20.3	STN 030
LAT 41-220N	DAY 01	NO.DPTH 18	WND-DIR 230	WW-CODE	
LON 52-230W	HR 19.0	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	207	33540		2349	15223
190	0010	2110	34329		2398	15245
190	0028	2044	35999	556	2542	15250
190	0072	1750	36262		2638	15177
190	0094	1725	36265	469	2644	15174
190	0141	1589	36037	459	2659	15138
190	0190	1453	35750	489	2667	15099
190	0239	1361	35627	441	2677	15076
190	0291	1282	35570	453	2689	15058
190	0400	1044	35293	344	2712	14989
190	0437	0939	35175	332	2721	14956
190	0620	0616	34966		2753	14859
190	0717	0551	35003	495	2764	14849
190	0903	0468	34986	550	2772	14846
190	1102	0433				
190	1423	0392	34963	604	2779	14901
190	1949	0362	34958	617	2781	14977
190	2520	0324	34960	613	2785	15059

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2070	33540		2349	15223	0000	00000	4410
0010	2110	34329		2398	15245	0042	00002	3945
0020	2086 C	3529 I		2477	15251	0078	00007	3190
0030	2029 B	3607 I		2552	15247	0106	00014	2482
0050	1888 I	3649 I		2621	15216	0150	00032	1837
0075	1745	36267		2639	15176	0194	00060	1667
0100	1711	3625 B		2646	15170	0235	00097	1611
0125	1641 B	3614 C		2654	15152	0275	00142	1543
0150	1562	3598 B		2661	15130	0313	00196	1489
0175	1492	3583 B		2665	15110	0350	00258	1454
0200	1432	35716		2669	15094	0386	00328	1420
0225	1384	35650		2674	15082	0422	00404	1378
0250	1344	35614		2680	15072	0456	00488	1332
0300	1266	35553		2691	15053	0521	00670	1236
0400	1044	35293		2712	14989	0636	01078	1043
0500	0795 B	3505 C		2734	14910	0730	01512	0836
0600	0637	34965		2750	14864	0807	01942	0685
0700	0559	34994		2762	14850	0871	02364	0572

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0508	3500 B		2769	14845 -	0926	02786	0511
1000	0447	34980		2774	14853	1025	03705	0473
1200	0419	34970		2776	14875	1120	04780	0464
1500	0386	34961		2779	14912	1260	06727	0456
2000	0350 C	34956		2782	14981	1492	10899	0454
2500	0325	34960		2785	15056	1722	16254	0452

C-REF-NO 361	YR 1962	DEPTH 4389	WAVES 1 22X2	AIR T	VIS
CONS. NO 031	MONTH 8	MXSAMPD 24	WAVES 2 21XX	WET B	STN 031
LAT 41-429N	DAY 01	NO.DPTH 19	WND-DIR 210	WW-CODE	
LON 52-145W	HR 23.9	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1019.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
239	0000	209	33830		2365	15232
239	0010	1996	33911		2396	15209
239	0030	2045	35989	532	2541	15250
239	0077	1580	35872		2648	15122
239	0102	1516	35837	458	2660	15106
239	0152	1394	35684	464	2675	15073
239	0205	1306	35587	436	2685	15052
239	0256	1170	35431	372	2700	15012
239	0309	1053	35325	321	2713	14978
239	0413	0775	35004	383	2733	14888
239	0505	0657	34927	429	2744	14856
239	0601	0521	34896	507	2759	14816
239	0694	0490	34939		2766	14820
239	0783	0456	34943	569	2770	14821
239	0952	0415	34938	613	2774	14832
239	1138	0402	34943	625	2776	14857
239	1419	0381	34944	628	2778	14896
239	1909	0365	34965	619	2782	14972
239	2395	0331	34952	625	2784	15040

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2090	33830		2365	15232	0000	00000	4251
0010	1996	33911		2396	15209	0041	00002	3958
0020	2010 I	3487 I		2466	15226	0078	00007	3302
0030	2045	35989		2541	15250	0107	00015	2584
0050	1869 I	3636 I		2616	15209	0152	00033	1883
0075	1603 D	3595 I		2649	15130	0196	00060	1579
0100	1519	35840		2659	15107	0234	00094	1482
0125	1457	3577 B		2668	15090	0271	00136	1411
0150	1398	35691		2674	15074	0306	00185	1356
0175	1357 B	3564 B		2679	15064	0339	00242	1314
0200	1315	35596		2684	15054	0372	00304	1272
0225	1254 B	35526		2691	15037	0403	00372	1213
0250	1187	35450		2698	15017	0433	00445	1148
0300	1073	35342		2711	14984	0488	00600	1033
0400	0807 B	3504 B		2732	14898	0583	00935	0842
0500	0662	34928		2743	14857	0662	01300	0732
0600	0522	34896		2759	14817	0729	01672	0584

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0488	34940		2766	14820	0784	02044	0521
0800	0451	34943		2771	14821	0835	02435	0484
1000	0410	34939		2775	14838	0931	03314	0457
1200	0397	34943		2777	14866	1023	04362	0456
1500	0378	34948		2779	14908	1162	06293	0456
2000	0353 B	3496 B		2782	14982	1394	10482	0457

C-REF-NO 361	YR 1962	DEPTH 3695	WAVES 1 22X2	AIR T 18.3	VIS
CONS. NO 032	MONTH 8	MXSAMPD 25	WAVES 2 22XX	WET B 17.9	STN 032
LAT 41-580N	DAY 02	NO.DPTH 19	WND-DIR 230	WW-CODE	
LON 52-050W	HR 03.8	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
038	0000	166	32846		2398	15097
038	0008	1634	32859		2405	15091
038	0026	0986	33210	725	2560	14880
038	0069	0958	34630		2675	14895
038	0095	1132	35176	525	2687	14969
038	0143	0916	34803	528	2696	14894
038	0191	0905	34996	425	2713	14900
038	0239	0801	34894	423	2721	14867
038	0288	0474	34475	548	2731	14740
038	0391	0406	34626	578	2750	14730
038	0515	0496	34921	516	2764	14792
038	0606	0456	34934	557	2769	14791
038	0697	0434	34939		2772	14797
038	0789	0422	34950	652	2774	14807
038	0972	0400	34937	637	2776	14829
038	1158	0372	34912	655	2777	14848
038	1446	0367	34927	639	2778	14894
038	1947	0357	34955	624	2782	14975
038	2462	0315	34939	639	2784	15045

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1660	32846		2398	15097	0000	00000	3941
0010	1573 I	3288 B		2420	15073	0039	00002	3729
0020	1226 I	3306 C		2505	14963	0072	00007	2919
0030	0930 I	3334 E		2579	14862	0098	00013	2219
0050	0814 I	3399 I		2648	14830	0136	00028	1566
0075	1001 E	3479 B		2681	14914	0172	00051	1267
0100	1121 G	3517 I		2688	14966	0203	00078	1200
0125	1026 I	3502 I		2694	14934	0232	00113	1154
0150	0911 C	3482 E		2698	14893	0261	00153	1115
0175	0902 F	3492 H		2707	14896	0288	00198	1037
0200	0897 B	35000		2714	14899	0313	00247	0973
0225	0847 B	34955		2719	14884	0337	00299	0934
0250	0729 F	3480 E		2724	14840	0360	00355	0880
0300	0441 F	3445 F		2733	14728	0402	00473	0784
0400	0412 B	3465 B		2752	14735	0473	00722	0616
0500	0485 C	3489 B		2763	14785	0531	00988	0530
0600	0460	34936		2769	14792	0582	01275	0478

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0434	34939		2772	14797	0629	01590	0455
0800	0421	34950		2775	14809	0674	01940	0442
1000	0395	34933		2776	14831	0764	02771	0444
1200	0370	34912		2777	14854	0854	03792	0446
1500	0367	34931		2779	14903	0991	05696	0453
2000	0350 B	34948		2782	14981	1222	09880	0458
2500	0311	34937		2785	15050	1453	15238	0448

C-REF-NO 361	YR 1962	DEPTH 4810	WAVES 1 18X1	AIR T 15.4	VIS
CONS. NO 033	MONTH 8	MXSAMPD 27	WAVES 2 22XX	WET B 15.3	STN 033
LAT 42-175N	DAY 02	NO.DPTH 19	WND-DIR	WW-CODE	
LON 51-510W	HR 08.2	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
082	0000	156	32749		2413	15065
082	0010	1427	32736		2440	15024
082	0029	0437	33129	845	2628	14664
082	0074	0668	34444		2705	14783
082	0099	0831	34863	441	2714	14856
082	0149	0557	34451	528	2719	14751
082	0199	0368	34573	600	2750	14682
082	0248	0390	33751	592	2683	14688
082	0298	0446	34760	607	2757	14734
082	0397	0450	34945	569	2771	14754
082	0520	0440	34951	600	2773	14770
082	0633	0425	34915	610	2771	14782
082	0735	0395	34889		2772	14786
082	0847	0367	34898	669	2776	14793
082	1059	0358	34904	654	2777	14825
082	1273	0357	34955	652	2782	14861
082	1610	0370	34948	626	2780	14923
082	2175	0335	34933	628	2782	15004
082	2720	0292	34954	643	2788	15079

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1560	32749		2413	15065	0000	00000	3797
0010	1427	32736		2440	15024	0037	00002	3536
0020	0926 I	3290 E		2546	14853	0067	00006	2534
0030	0422 F	3316 B		2632	14658	0089	00012	1711
0050	0314 I	3375 I		2690	14624	0118	00023	1164
0075	0676	34467		2705	14786	0145	00040	1028
0100	0829 B	3486 B		2714	14855	0170	00063	0953
0125	0733 I	3472 I		2717	14820	0194	00090	0925
0150	0552	3446 B		2720	14749	0217	00122	0892
0175	0440 C	3454 I		2740	14708	0237	00155	0705
0200	0367	3455 B		2749	14682	0254	00188	0624
0225	0365 D	3408 I		2711	14678	0274	00232	0976
0250	0392	3378 D		2685	14690	0302	00301	1233
0300	0447	3478 B		2758	14735	0347	00423	0550
0400	0450	34947		2771	14755	0397	00599	0437
0500	0442	34960		2773	14768	0440	00802	0429
0600	0431	34927		2772	14779	0485	01054	0450

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0406	34896		2772	14785	0531	01360	0455
0800	0377	34892		2775	14790	0575	01707	0434
1000	0357	34901		2777	14815	0662	02508	0422
1200	0356	34937		2780	14848	0746	03463	0411
1500	0366	34956		2781	14903	0875	05257	0434
2000	0350	34936		2781	14981	1104	09417	0468
2500	0317 B	34946		2785	15052	1338	14840	0450

C-REF-NO 361	YR 1962	DEPTH 2103	WAVES 1	X1	AIR T	VIS
CONS. NO 034	MONTH 8	MXSAMPD 20	WAVES 2	22XX	WET B	STN 034
LAT 42-376N	DAY 02	NO.DPTH 18	WND-DIR	090	WW-CODE	
LON 51-417W	HR 12.6	W-COLOR	WND-SPD	05	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1020.		CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
126	0000	143	32658		2434	15023
126	0010	1427	32647		2434	15023
126	0030	0478	33097	849	2621	14681
126	0075	0570	34208		2699	14741
126	0100	0818	34735	496	2706	14849
126	0150	0337	34159	640	2720	14655
126	0200	0421	34478	573	2737	14703
126	0250	0444	34647	561	2748	14723
126	0300	0563	34921	493	2756	14784
126	0400	0375	34763	633	2765	14721
126	0500	0434	34925	600	2771	14764
126	0597	0414	34939	628	2774	14772
126	0694	0400	34924		2775	14782
126	0792	0398	34936	633	2776	14798
126	0986	0371	34908	659	2776	14818
126	1181	0362	34904	659	2777	14847
126	1474	0363	34927	653	2779	14897
126	1967	0349	34936	646	2781	14975

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1430	32658		2434	15023	0000	00000	3597
0010	1427	32647		2434	15023	0036	00002	3602
0020	0993 I	3283 F		2529	14877	0068	00006	2692
0030	0478	33097		2621	14681	0090	00012	1814
0050	0300 I	3360 D		2679	14615	0122	00024	1272
0075	0570	34208		2699	14741	0151	00043	1089
0100	0818	34735		2706	14849	0178	00067	1029
0125	0624 I	3453 I		2717	14775	0203	00095	0924
0150	0337	34159		2720	14655	0225	00127	0886
0175	0348 I	3427 I		2728	14665	0247	00163	0813
0200	0421	34478		2737	14703	0266	00200	0735
0225	0430 C	3457 C		2743	14712	0284	00239	0682
0250	0444	34647		2748	14723	0301	00280	0638
0300	0563	34921		2756	14784	0332	00366	0579
0400	0375	34763		2765	14721	0386	00558	0492
0500	0434	34925		2771	14764	0433	00776	0446
0600	0413	34939		2774	14772	0477	01024	0422
0700	0400	34925		2775	14783	0520	01311	0427

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0397	34935		2776	14799	0563	01643	0425
1000	0370	34907		2776	14820	0650	02448	0432
1200	0362	34905		2777	14850	0738	03451	0441
1500	0357 B	3492 B		2779	14899	0874	05342	0451
2000	0349	34938		2781	14980	1106	09550	0464

C-REF-NO 361	YR 1962	DEPTH 978	WAVES 1 12X2	AIR T 14.4	VIS
CONS. NO 035	MONTH 8	MXSAMPD 09	WAVES 2 22XX	WET B 14.0	STN 035
LAT 42-540N	DAY 02	NO.DPTH 15	WND-DIR 120	WW-CODE	
LON 51-290W	HR 16.1	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
161	0000	142	32590		2431	15019
161	0008	1388	32589		2437	15009
161	0026	1264	32705	668	2471	14972
161	0066	0304	33794		2694	14622
161	0089	0319	33966	690	2707	14635
161	0135	0236	34161	661	2729	14609
161	0183	0305	34386	633	2741	14650
161	0232	0353	34558	630	2750	14681
161	0281	0377	34662	617	2756	14701
161	0346	0386	34795	606	2766	14717
161	0436	0385	34837	617	2769	14732
161	0530	0386	34883	639	2773	14749
161	0623	0378	34878		2773	14760
161	0723	0369	34884	664	2775	14773
161	0918	0363	34886	662	2776	14803

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1420	32590		2431	15019	0000	00000	3627
0010	1381	32592		2439	15007	0036	00002	3551
0020	1320 B	32644		2455	14989	0071	00007	3398
0030	1161 I	3281 H		2498	14938	0103	00015	2989
0050	0670 I	3335 I		2618	14765	0152	00034	1849
0075	0287 I	3388 C		2703	14618	0188	00056	1044
0100	0299 E	3402 B		2713	14629	0213	00079	0953
0125	0254 D	3413 B		2725	14615	0236	00104	0836
0150	0250 C	34233		2734	14619	0256	00133	0754
0175	0289 B	34350		2740	14641	0274	00163	0700
0200	0324	34453		2745	14662	0291	00196	0657
0225	0348	34537		2749	14677	0308	00231	0618
0250	0364	34600		2753	14689	0323	00268	0589
0300	0381	34706		2759	14706	0351	00348	0532
0400	0386	3483 B		2769	14726	0401	00525	0454
0500	0386	34871		2772	14743	0446	00731	0432
0600	0380	34881		2773	14758	0489	00977	0428
0700	0371	34882		2774	14770	0532	01265	0425
0800	0366	34882		2775	14785	0575	01599	0429

C-REF-NO 361	YR 1962	DEPTH 106	WAVES 1 12X2	AIR T	VIS
CONS. NO 036	MONTH 8	MXSAMPD 01	WAVES 2 16XX	WET B	STN 036
LAT 43-178N	DAY 02	NO.DPTH 7	WND-DIR 130	WW-CODE	
LON 51-210W	HR 19.0	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	131	32657		2458	14983
190	0010	1162	32728	707	2492	14934
190	0020	0650	32927	830	2588	14747
190	0030	0362	33056	889	2630	14631
190	0050	0045	33203	829	2666	14497
190	0074	0022	33384	753	2681	14493
190	0099	0020	33406	753	2683	14496

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1310	32657		2458	14983	0000	00000	3365
0010	1162	32728		2492	14934	0032	00002	3047
0020	0650	32927		2588	14747	0058	00005	2137
0030	0362	33056		2630	14631	0078	00010	1732
0050	0045	33203		2666	14497	0109	00023	1392
0075	-0041 I	3336 D		2682	14464	0142	00044	1231
0100	0027 B	33406		2683	14499	0173	00072	1227

C-REF-NO 361	YR 1962	DEPTH 68	WAVES 1 12X2	AIR T	VIS
CONS. NO 037	MONTH 8	MXSAMPD 01	WAVES 2 14XX	WET B	STN 037
LAT 43-307N	DAY 02	NO.DPTH 6	WND-DIR 120	WW-CODE	
LON 51-067W	HR 21.5	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1015.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
215	0000	133	32609		2450	14989
215	0010	1291	32757	642	2470	14979
215	0020	1169	32827	665	2498	14940
215	0030	0625	33052	803	2601	14740
215	0050	0154	33228	719	2661	14546
215	0060	0147	33238	701	2662	14545

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1330	32609		2450	14989	0000	00000	3438
0010	1291	32757		2470	14979	0034	00002	3259
0020	1169	32827		2498	14940	0065	00006	2989
0030	0625	33052		2601	14740	0090	00013	2014
0050	0154	33228		2661	14546	0125	00026	1438

C-REF-NO 361	YR 1962	DEPTH 852	WAVES 1 12X2	AIR T 17.8	VIS
CONS. NO 038	MONTH 8	MXSAMPD 04	WAVES 2 14XX	WET B 17.5	STN 038
LAT 43-055N	DAY 03	NO.DPTH 11	WND-DIR 120	WW-CODE	
LON 51-220W	HR 01.2	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1012.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
012	0000	156	32555		2398	15063
012	0009	1414	32611		2434	15018
012	0019	1018	32872	697	2528	14886
012	0051	0319	33594		2677	14624
012	0063	0225	33695	713	2693	14586
012	0099	0258	33949	658	2711	14610
012	0138	0335	34203	612	2724	14653
012	0178	0472	34480	544	2732	14721
012	0220	0512	34597	517	2736	14746
012	0311	0467	34695	540	2749	14744
012	0413	0390	34701	604	2758	14728

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1560	32555		2398	15063	0000	00000	3939
0010	1378 C	32633		2443	15007	0037	00002	3516
0020	0985	32901		2536	14875	0068	00006	2627
0030	0692 D	3317 E		2601	14768	0092	00012	2012
*0050	0329	33578		2675	14628	0125	00025	1310
0075	0208 H	33785		2702	14582	0155	00044	1055
0100	0259	33956		2711	14611	0180	00067	0968
0125	0304	34119		2720	14636	0204	00093	0885
0150	0378 C	3429 B		2727	14674	0225	00124	0825
0175	0462	34462		2731	14716	0246	00158	0789
0200	0502 B	3456 B		2734	14738	0265	00195	0766
0225	0512	34606		2737	14747	0284	00237	0743
0250	0508 C	34646		2741	14750	0303	00282	0711
*0300	0478 B	34691		2748	14746	0337	00378	0648
0400	0409 B	34712		2757	14734	0398	00596	0566

C-REF-NO 361 YR 1962 DEPTH 113 WAVES 1 32X2 AIR T 12.8 VIS
 CONS. NO 039 MONTH 8 MXSAMPD 01 WAVES 2 22XX WET B 12.8 STN 039
 LAT 43-123N DAY 03 NO.DPTH 7 WND-DIR 320 WW-CODE
 LON 51-180W HR 13.4 W-COLOR WND-SPD 08 CLD-TPE
 MARSQ SQ 150 C/I 1810 W-TRNSP BARO 1015. CLD-AMT HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
134	0000	123	32639		2472	14955
134	0010	1235	32646	687	2472	14959
134	0020	0964	32805	731	2532	14866
134	0030	0607	33277	808	2621	14736
134	0049	0453	33532	785	2659	14679
134	0074	0327	33904	683	2701	14635
134	0098	0253	33860	675	2704	14606

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1230	32639		2472	14955	0000	00000	3231
0010	1235	32646		2472	14959	0033	00002	3237
0020	0964	32805		2532	14866	0062	00006	2665
0030	0607	33277		2621	14736	0085	00012	1824
0050	0447	33551		2661	14677	0118	00025	1443
0075	0317 B	3384 I		2696	14630	0150	00045	1106
0100	0250	3385 B		2704	14605	0177	00069	1037

C-REF-NO 361	YR 1962	DEPTH 1350	WAVES 1 32X2	AIR T 14.1	VIS
CONS. NO 040	MONTH 8	MXSAMPD 10	WAVES 2 22XX	WET B 11.7	STN 040
LAT 42-540N	DAY 03	NO.DPTH 14	WND-DIR 320	WW-CODE	
LON 51-292W	HR 16.3	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
163	0000	141	32567		2431	15015
163	0050	0343	33245		2647	14629
163	0100	0207	33952		2715	14588
163	0150	0374	34322		2730	14673
163	0200	0396	34521		2743	14693
163	0250	0349	34565		2751	14682
163	0300	0375	34686		2758	14703
163	0400	0403	34846		2768	14734
163	0500	0410	34903		2772	14754
163	0599	0391	34907		2774	14762
163	0699	0374	34890		2775	14772
163	0799	0364	34883		2775	14784
163	0899	0364	34895		2776	14801
163	0999	0361	34888		2776	14816

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1410	32567		2431	15015	0000	00000	3624
0010	1168 I	3273 C		2491	14937	0034	00002	3058
0020	0951 I	3288 E		2540	14862	0062	00006	2589
*0030	0759 I	3303 G		2581	14792	0086	00012	2202
0050	0343	33245		2647	14629	0124	00027	1573
0075	0198 I	3362 D		2689	14575	0159	00048	1174
0100	0207	33952		2715	14588	0185	00072	0929
0125	0281 I	3417 B		2726	14627	0207	00097	0827
0150	0374	34322		2730	14673	0228	00126	0799
0175	0398 B	34442		2737	14689	0247	00158	0736
0200	0396	34521		2743	14693	0265	00192	0677
0225	0372 C	3455 C		2748	14688	0282	00228	0635
0250	0349	34565		2751	14682	0297	00266	0601
0300	0375	34686		2758	14703	0326	00347	0540
0400	0403	34846		2768	14734	0376	00527	0460
0500	0410	34903		2772	14754	0422	00735	0435
0600	0391	34907		2774	14762	0465	00980	0420
0700	0374	34890		2775	14772	0507	01265	0423
0800	0364	34883		2775	14784	0550	01596	0426
1000	0361	34888		2776	14816	0638	02405	0436

C-REF-NO 361	YR 1962	DEPTH 1350	WAVES 1 32X2	AIR T 13.3	VIS
CONS. NO 041	MONTH 8	MXSAMPD 10	WAVES 2 22XX	WET B 13.1	STN 041
LAT 42-530N	DAY 04	NO.DPTH 14	WND-DIR 320	WW-CODE	
LON 51-263W	HR 00.4	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1023.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
004	0000	144	32535		2422	15024
004	0047	0257	33366		2664	14593
004	0095	0352	34045		2710	14651
004	0142	0570	34506		2722	14755
004	0190	0393	34441		2737	14689
004	0238	0477	34696		2748	14736
004	0286	0444	34743		2756	14731
004	0382	0412	34827		2766	14734
004	0505	0384	34848		2770	14743
004	0595	0393	34891		2773	14762
004	0689	0375	34889		2775	14770
004	0783	0372	34887		2775	14785
004	0879	0366	34889		2775	14798
004	0977	0365	34887		2775	14814

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1440	32535		2422	15024	0000	00000	3707
0010	1172 I	32728		2490	14938	0034	00002	3064
0020	0935 I	32914		2545	14856	0062	00006	2540
*0030	0729 I	33091		2590	14782	0086	00012	2117
0050	0242 F	33414		2669	14587	0121	00025	1361
0075	0225 I	33785		2700	14589	0151	00044	1068
0100	0381 D	3411 B		2712	14665	0177	00067	0961
0125	0506 I	3438 C		2720	14725	0200	00094	0893
0150	0545 H	3450 E		2725	14747	0222	00125	0850
0175	0456 I	3447 H		2733	14714	0243	00159	0773
0200	0405 E	3449 D		2740	14697	0261	00195	0709
0225	0447 F	3462 D		2746	14720	0279	00232	0658
0250	0474 B	3472 B		2750	14737	0295	00272	0618
0300	0438	34758		2757	14730	0324	00355	0554
0400	0406	34832		2767	14735	0376	00539	0474
0500	0385	34848		2770	14742	0423	00754	0448
0600	0392	34891		2773	14763	0467	01006	0433
0700	0374	34889		2775	14772	0510	01295	0424
0800	0371	34887		2775	14787	0554	01629	0430

C-REF-NO 361	YR 1962	DEPTH 1350	WAVES 1	X0	AIR T 12.8	VIS
CONS. NO 042	MONTH 8	MXSAMPD 10	WAVES 2 32XX	WET B 12.5	STN 042	
LAT 42-507N	DAY 04	NO.DPTH 14	WND-DIR 060	WW-CODE		
LON 51-286W	HR 08.5	W-COLOR	WND-SPD 02	CLD-TPE		
MARSD SQ 150	C/I 1810	W-TRNSP	BARO	CLD-AMT		HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
085	0000	144	32535		2422	15024
085	0050	0096	33384		2677	14522
085	0100	0348	34023		2708	14650
085	0150	0400	34323		2727	14684
085	0200	0468	34538		2737	14724
085	0251	0441	34616		2746	14722
085	0301	0489	34812		2756	14753
085	0401	0493	34954		2767	14773
085	0522	0409	34897		2772	14757
085	0627	0378	34882		2774	14761
085	0731	0367	34883		2775	14774
085	0837	0367	34887		2775	14792
085	0941	0363	34888		2776	14807
085	1047	0362	34888		2776	14824

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1440	32535		2422	15024	0000	00000	3707
0010	1175 I	32731		2490	14939	0034	00002	3068
0020	0938 I	3292 B		2545	14858	0062	00006	2543
*0030	0729 I	3309 C		2590	14782	0086	00012	2117
0050	0096	33384		2677	14522	0120	00025	1283
0075	0135 I	3374 B		2703	14549	0149	00043	1039
0100	0348	34023		2708	14650	0175	00066	0995
0125	0386 E	3420 C		2719	14672	0199	00094	0901
0150	0400	34323		2727	14684	0220	00124	0825
0175	0439 B	34444		2733	14706	0241	00158	0776
0200	0468	34538		2737	14724	0260	00195	0741
0225	0456 D	3458 C		2741	14723	0278	00234	0701
0250	0442	34615		2746	14722	0295	00276	0660
0300	0488	34808		2756	14752	0326	00363	0573
0400	0493	34954		2767	14773	0379	00553	0482
0500	0426 B	3492 B		2771	14761	0426	00768	0444
0600	0383	34884		2773	14759	0470	01017	0429
0700	0369	34882		2775	14769	0513	01305	0423
0800	0367	34886		2775	14785	0556	01637	0427
1000	0363	34888		2776	14817	0644	02449	0438

C-REF-NO 361	YR 1962	DEPTH 1189	WAVES 1 09X1	AIR T 13.9	VIS
CONS. NO 043	MONTH 8	MXSAMPD 11	WAVES 2 01XX	WET B 13.2	STN 043
LAT 43-000N	DAY 04	NO.DPTH 14	WND-DIR 120	WW-CODE	
LON 51-369W	HR 22.0	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1030.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
220	0000	141	32584		2432	15015
220	0049	0442	33504		2658	14674
220	0099	0256	33914		2708	14609
220	0148	0266	34175		2728	14625
220	0198	0417	34521		2741	14702
220	0247	0415	34618		2749	14710
220	0297	0360	34648		2757	14696
220	0396	0382	34800		2767	14724
220	0472	0398	34866		2770	14744
220	0567	0491	34873		2761	14798
220	0663	0378	34883		2774	14767
220	0760	0376	34885		2774	14782
220	0858	0368	34890		2775	14795
220	1058	0364	34888		2776	14827

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1410	32584		2432	15015	0000	00000	3612
0010	1194 I	3279 C		2490	14946	0034	00002	3060
0020	0997 I	3297 F		2540	14880	0062	00006	2593
*0030	0821 I	3315 H		2581	14818	0086	00012	2201
0050	0433	33516		2659	14671	0123	00026	1456
0075	0282 I	3376 D		2693	14614	0156	00047	1134
0100	0255	33920		2709	14608	0182	00070	0991
0125	0241	3406 B		2721	14608	0206	00097	0878
0150	0272	34190		2729	14628	0227	00127	0804
0175	0348 F	3437 D		2736	14667	0247	00160	0739
0200	0419	34528		2741	14703	0265	00194	0695
0225	0428 B	3459 B		2745	14712	0282	00232	0659
0250	0412	34620		2749	14710	0298	00271	0623
0300	0359	34652		2757	14696	0327	00354	0550
0400	0382	34805		2767	14724	0379	00537	0468
0500	0432 E	34872		2767	14763	0427	00760	0482
0600	0458 F	34877		2765	14790	0477	01047	0520
0700	0371 B	34884		2775	14770	0525	01364	0424
0800	0373	34887		2775	14788	0569	01698	0433
1000	0366	34889		2775	14818	0657	02519	0441

C-REF-NO 361	YR 1962	DEPTH 1097	WAVES 1	XX	AIR T 13.6	VIS
CONS. NO 044	MONTH 8	MXSAMPD 10	WAVES 2	XX	WET B 13.2	STN 044
LAT 42-562N	DAY 05	NO.DPTH 14	WND-DIR	-	WW-CODE	
LON 51-264W	HR 08.8	W-COLOR	WND-SPD		CLO-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO		CLO-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
088	0000	143	32529		2424	15021
088	0042	0720	32911		2577	14778
088	0085	0256	33743		2694	14604
088	0127	0209	33958		2715	14593
088	0170	0370	34330		2731	14675
088	0212	0322	34400		2741	14662
088	0254	0375	34571		2749	14694
088	0340	0364	34740		2764	14706
088	0545	0380	34873		2773	14748
088	0602	0380	34877		2773	14758
088	0722	0372	34878		2774	14774
088	0815	0369	34880		2774	14789
088	0915	0365	34886		2775	14804
088	1012	0363	34888		2776	14819

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1430	32529		2424	15021	0000	00000	3692
0010	1225 C	3267 I		2475	14956	0035	00002	3203
0020	1039 E	3280 I		2519	14893	0065	00006	2785
*0030	0871 G	3294 I		2557	14834	0091	00013	2431
0050	0608 B	3307 G		2604	14737	0135	00031	1980
0075	0333 B	3356 H		2673	14633	0177	00056	1331
0100	0205 D	3385 G		2707	14585	0207	00082	1008
0125	0204	3395 B		2715	14591	0231	00110	0927
0150	0295 I	3417 E		2725	14637	0253	00142	0843
0175	0367 C	3434 B		2732	14675	0274	00176	0779
0200	0341 E	3439 C		2738	14668	0293	00212	0720
0225	0335 C	3445 B		2744	14671	0310	00250	0671
0250	0369	34554		2749	14690	0327	00290	0629
0300	0378 D	3468 B		2758	14705	0356	00373	0548
0400	0367 B	3481 B		2769	14718	0407	00552	0450
0500	0375 B	3487 B		2773	14739	0451	00755	0422
0600	0380	34877		2773	14758	0494	00999	0430
0700	0374	34878		2774	14771	0537	01290	0431
0800	0369	34880		2774	14786	0581	01629	0434
1000	0363	34888		2776	14817	0669	02448	0439

C-REF-NO 361	YR 1962	DEPTH 3585	WAVES 1 18X2	AIR T 19.8	VIS
CUNS. NO 045	MONTH 8	MXSAMPD 13	WAVES 2 18XX	WET B 19.0	STN 045
LAT 41-566N	DAY 05	NO.DPTH 14	WND-DIR 200	WW-CODE	
LON 51-597W	HR 21.1	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1023.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
211	0000	183	33371		2397	15154
211	0048	1195	35233		2680	14984
211	0096	1196	35227		2679	14992
211	0145	1226	35487		2693	15014
211	0193	0845	34884		2713	14877
211	0241	0828	34920		2719	14878
211	0290	0612	34635		2727	14798
211	0386	0500	34725		2748	14770
211	0645	0442	34926		2770	14792
211	0773	0425	34939		2773	14806
211	0902	0410	34946		2775	14821
211	1031	0415	34967		2777	14845
211	1155	0382	34929		2777	14851
211	1280	0380	34931		2777	14872

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT. EN	SVA
0000	1830	33371		2397	15154	0000	00000	3945
0010	1692 I	3375 I		2460	15120	0037	00002	3355
0020	1568 I	3410 I		2514	15087	0068	00006	2835
*0030	1458 I	3441 I		2562	15058	0094	00013	2381
0050	1188 B	3525 D		2682	14982	0131	00027	1248
0075	1155 I	3533 I		2695	14975	0161	00046	1134
0100	1206 C	3526 D		2680	14996	0191	00073	1284
0125	1238 I	3542 I		2686	15013	0223	00110	1234
0150	1187 F	3543 F		2696	15000	0253	00152	1139
0175	0990 I	3512 I		2708	14931	0280	00197	1027
0200	0837 F	3488 E		2714	14875	0305	00246	0970
0225	0824 I	3489 I		2717	14874	0329	00298	0947
0250	0792 D	3487 D		2721	14865	0353	00356	0917
0300	0590 C	3463 D		2729	14791	0397	00480	0832
0400	0492 B	34740		2750	14769	0471	00742	0640
0500	0451 G	3483 B		2762	14770	0531	01014	0534
*0600	0438 D	34902		2769	14782	0582	01302	0478
0700	0434	34935		2772	14798	0629	01618	0459
0800	0421	34940		2774	14809	0675	01972	0450
1000	0415	34964		2776	14840	0765	02810	0444
1200	0389 C	3494 B		2777	14862	0856	03835	0448

C-REF-NO 361	YR 1962	DEPTH 3658	WAVES 1 18X2	AIR T 21.5	VIS
CONS. NO 046	MONTH 8	MXSAMPD 09	WAVES 2 18XX	WET B 20.7	STN 046
LAT 41-515N	DAY 06	NO.DPTH 14	WND-DIR 180	WW-CODE	
LON 52-017W	HR 08.6	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1022.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
086	0000	193	33808		2406	15188
086	0050	1377	35320		2650	15046
086	0100	1292	35460		2678	15028
086	0149	1240	35461		2689	15019
086	0199	1097	35293		2703	14975
086	0249	0654	34537		2714	14807
086	0298	0650	34635		2722	14815
086	0398	0604	34821		2743	14816
086	0458	0592	34955		2755	14822
086	0571	0478	34919		2766	14794
086	0660	0452	34941		2770	14798
086	0750	0437	34948		2773	14807
086	0848	0427	34956		2774	14819
086	0940	0401	34932		2775	14824

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT. EN	SVA
0000	1930	33808		2406	15188	0000	00000	3867
0010	1814 G	3413 I		2459	15160	0036	00002	3358
0020	1708 I	3442 I		2507	15134	0068	00006	2904
*0030	1611 I	3468 I		2550	15110	0095	00013	2503
0050	1377	35320		2650	15046	0136	00029	1555
0075	1303 I	3549 I		2678	15028	0172	00052	1297
0100	1292	35460		2678	15028	0204	00081	1300
0125	1269 C	35479		2684	15025	0237	00118	1248
0150	1239	35461		2689	15018	0268	00162	1211
0175	1190 D	3542 D		2695	15005	0297	00211	1156
0200	1087 B	3528 B		2703	14972	0326	00266	1084
0225	0858 I	3488 I		2711	14887	0352	00323	1003
0250	0652	34535		2714	14806	0377	00384	0972
0300	0649	34639		2722	14815	0424	00517	0899
0400	0604	34826		2743	14816	0505	00805	0715
0500	0551 D	3496 D		2760	14813	0570	01099	0562
0600	0466	34925		2768	14794	0623	01399	0494
0700	0444	34945		2772	14802	0672	01722	0464
0800	0433	34954		2774	14814	0718	02079	0453

C-REF-NO 361	YR 1962	DEPTH 3475	WAVES 1 14X2	AIR T 20.6	VIS
CONS. NO 047	MONTH B	MXSAMPD 11	WAVES 2 14XX	WET B 20.3	STN 047
LAT 41-511N	DAY 06	NO.DPTH 14	WND-DIR 180	WW-CODE	
LON 51-570W	HR 17.1	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
171	0000	191	33904		2418	15183
171	0041	1221	34929		2651	14988
171	0084	1216	35223		2675	14997
171	0127	1181	35270		2685	14992
171	0172	1168	35375		2696	14997
171	0218	0716	34605		2711	14827
171	0264	0594	34445		2714	14784
171	0358	0649	34844		2739	14827
171	0520	0509	34898		2761	14798
171	0634	0463	34928		2768	14798
171	0754	0425	34953		2774	14803
171	0869	0418				
171	0983	0390	34923		2776	14826
171	1093	0385	34922		2776	14842

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1910	33904		2418	15183	0000	00000	3749
0010	1743 I	3418 E		2480	15140	0035	00002	3161
0020	1595 I	3442 I		2533	15100	0064	00006	2657
*0030	1465 I	3464 I		2578	15063	0089	00012	2229
0050	1191 I	3503 D		2665	14980	0125	00026	1410
0075	1188 I	3521 D		2679	14985	0159	00048	1285
0100	1203	3525 C		2680	14995	0192	00077	1286
0125	1183	35270		2685	14993	0223	00114	1241
0150	1199 I	3537 I		2690	15004	0254	00157	1202
0175	1140 D	3533 D		2698	14987	0284	00206	1133
0200	0900 I	3492 I		2708	14899	0311	00258	1033
0225	0684 C	3455 B		2711	14815	0336	00314	0997
0250	0608 D	3445 C		2713	14788	0361	00375	0980
0300	0597 I	3456 I		2723	14793	0409	00508	0892
0400	0623 F	3490 F		2746	14824	0488	00789	0687
0500	0532 D	3491 D		2759	14804	0552	01080	0571
0600	0474	34920		2766	14797	0606	01387	0507
0700	0439	34944		2772	14800	0655	01712	0459
0800	0422	34950		2774	14809	0701	02064	0444
1000	0395 B	3493 B		2776	14831	0791	02895	0442

C-REF-NO 361	YR 1962	DEPTH 2414	WAVES 1 18X1	AIR T 22.8	VIS
CONS. NO 048	MONTH 8	MXSAMPD 10	WAVES 2 18XX	WET B 22.2	STN 048
LAT 42-255N	DAY 08	NO.DPTH 14	WND-DIR -	WW-CODE	
LON 61-395W	HR 19.2	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
192	0000	214	32428		2245	15229
192	0049	1522	35045		2598	15089
192	0098	1450	35708		2664	15083
192	0146	1355	35620		2678	15059
192	0195	1280	35560		2688	15041
192	0244	1156	35424		2702	15005
192	0292	1012	35252		2715	14959
192	0390	0808	35074		2734	14897
192	0520	0582	34937		2755	14828
192	0615	0512	34943		2764	14816
192	0710	0471	34947		2769	14815
192	0806	0455	34963		2772	14824
192	0904	0435	34967		2774	14832
192	1003	0411	34940		2775	14838

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2140	32428		2245	15229	0000	00000	5396
0010	2012 I	3303 I		2325	15203	0050	00002	4635
0020	1895 I	3358 I		2397	15179	0093	00009	3954
*0030	1789 I	3407 I		2461	15155	0130	00018	3349
0050	1518	35072		2601	15089	0184	00039	2025
0075	1451 I	3557 I		2653	15078	0229	00067	1533
0100	1446	3571 B		2666	15082	0266	00000	1423
0125	1397	3570 H		2675	15070	0301	00140	1337
0150	1349	35616		2679	15057	0334	00187	1312
0175	1312 B	35587		2684	15049	0367	00241	1267
0200	1269	35549		2690	15038	0398	00301	1218
0225	1208	35484		2697	15021	0428	00366	1157
0250	1138	35402		2704	14999	0457	00436	1094
0300	0993	35232		2716	14953	0509	00582	0977
0400	0787	35058		2736	14891	0598	00900	0799
0500	0610	34949		2752	14837	0671	01233	0646
0600	0519	34939		2763	14816	0732	01572	0549
0700	0474	34946		2768	14814	0785	01925	0499
0800	0456	34962		2772	14823	0834	02305	0476
1000	0412	34941		2775	14838	0928	03178	0458

C-REF-NO 361	YR 1962	DEPTH 1829	WAVES 1 18X1	AIR T	VIS
CONS. NO 049	MONTH 8	MXSAMPD 10	WAVES 2 18XX	WET B	STN 049
LAT 42-260N	DAY 09	NO.DPTH 14	WND-DIR 180	WW-CODE	
LON 61-415W	HR 01.7	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
017	0000	201	31710		2225	15186
017	0050	1624	35486		2608	15127
017	0100	1436	35684		2666	15078
017	0150	1332	35616		2682	15052
017	0200	1224	35500		2695	15022
017	0250	1053	35277		2709	14968
017	0300	0933	35179		2722	14931
017	0400	0694	34984		2744	14854
017	0499	0560	34939		2758	14816
017	0599	0501	34968		2767	14809
017	0699	0461	34947		2770	14809
017	0798	0451	34962		2772	14821
017	0898	0428	34962		2775	14828
017	0998	0409	34943		2775	14837

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2010	31710		2225	15186	0000	00000	5587
0010	1925 B	3251 I		2308	15173	0052	00002	4803
0020	1846 C	3323 I		2383	15161	0097	00009	4092
*0030	1773 E	3388 I		2450	15148	0135	00019	3455
0050	1624	35486		2608	15127	0189	00039	1952
0075	1512 C	3583 I		2660	15100	0232	00066	1471
0100	1436	35684		2666	15078	0269	00099	1423
0125	1379 B	3567 B		2677	15064	0303	00139	1325
0150	1332	35616		2682	15052	0336	00185	1277
0175	1282	35568		2689	15038	0368	00237	1222
0200	1224	35500		2695	15022	0398	00295	1168
0225	1139 C	3539 C		2702	14995	0426	00357	1101
0250	1053	35277		2709	14968	0453	00423	1036
0300	0933	35179		2722	14931	0502	00561	0918
0400	0694	34984		2744	14854	0585	00853	0719
0500	0559	34939		2758	14816	0651	01155	0587
0600	0500	34968		2767	14809	0706	01465	0504
0700	0461	34947		2770	14809	0756	01797	0482
0800	0451	34962		2772	14821	0804	02168	0469
1000	0409	34942		2775	14837	0898	03031	0452

C-REF-NO 361	YR 1962	DEPTH 2640	WAVES 1 18X1	AIR T 21.4	VIS
CONS. NO 050	MONTH 8	MXSAMPC 10	WAVES 2 16XX	WET B 21.1	STN 050
LAT 42-250N	DAY 09	NO.DPTH 14	WND-DIR 180	WW-CODE	
LON 61-415W	HR 07.4	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1006.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	196	31926		2255	15174
074	0040	1968	35552		2529	15226
074	0080	1444	35444		2645	15075
074	0122	1407	35638		2668	15072
074	0164	1324	35553		2679	15051
074	0205	1274	35556		2689	15041
074	0249	1184	35464		2700	15016
074	0340	0952	35214		2722	14945
074	0558	0536	34929		2760	14816
074	0647	0501	34956		2766	14817
074	0744	0458	34941		2770	14815
074	0843	0450	34968		2773	14828
074	0943	0429	34955		2774	14836
074	1043	0406	34937		2775	14843

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1960	31926		2255	15174	0000	00000	5307
0010	1921 I	3282 I		2333	15176	0050	00002	4565
0020	1882 I	3361 I		2403	15175	0092	00009	3898
*0030	1841 I	3430 I		2465	15173	0128	00018	3307
0050	1840 I	3569 I		2572	15193	0185	00040	2302
0075	1511 I	3555 I		2639	15096	0235	00071	1668
0100	1396 I	3553 F		2662	15064	0274	00106	1452
0125	1401	35635		2669	15071	0310	00147	1395
0150	1352 B	3559 D		2676	15058	0344	00195	1335
0175	1311	3555 B		2682	15048	0377	00251	1288
0200	1280	35556		2688	15042	0409	00312	1234
0225	1236	35521		2694	15031	0439	00378	1182
0250	1182	35461		2700	15015	0469	00449	1130
0300	1056 B	3532 B		2713	14977	0523	00601	1017
0400	0804 E	35089		2736	14898	0615	00926	0803
0500	0614 E	34959		2752	14838	0688	01259	0644
0600	0515 B	34939		2763	14814	0748	01596	0543
0700	0476	34948		2768	14815	0800	01948	0500
0800	0452	34956		2772	14822	0850	02327	0476
1000	0418	34950		2775	14841	0944	03201	0458

C-REF-NO 361	YR 1962	DEPTH 3017	WAVES 1 18X2	AIR T	VIS
CONS. NO 051	MONTH 8	MXSAMPD 11	WAVES 2 18XX	WET B	STN 051
LAT 42-229N	DAY 09	NO.DPTH 14	WND-DIR 180	WW-CODE	
LON 61-370W	HR 13.4	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1010.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
134	0000	191	32115		2282	15162
134	0068	1518	35631		2644	15098
134	0114	1425	35709		2670	15077
134	0159	1324	35570		2680	15050
134	0205	1252	35520		2691	15033
134	0251	1142	35406		2703	15001
134	0296	1010	35264		2716	14959
134	0387	0747	35021		2739	14873
134	0666	0466	34946		2769	14805
134	0754	0454	34963		2772	14815
134	0845	0440	34964		2774	14824
134	0935	0415	34940		2774	14829
134	1028	0408	34944		2775	14841
134	1122	0402	34944		2776	14855

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1910	32115		2282	15162	0000	00000	5049
0010	1847 C	3274 I		2345	15153	0048	00002	4447
0020	1787 E	3331 I		2403	15144	0090	00009	3895
*0030	1731 G	3383 I		2456	15135	0126	00018	3394
*0050	1629 I	3469 I		2546	15118	0186	00041	2542
0075	1500 B	3571 I		2654	15095	0237	00073	1529
0100	1446 C	3580 I		2672	15083	0274	00105	1363
0125	1399	3568 B		2673	15070	0308	00145	1358
0150	1343	3560 B		2679	15055	0341	00192	1310
0175	1299 B	3555 B		2684	15044	0374	00246	1268
0200	1260	35525		2690	15035	0405	00306	1218
0225	1208	35476		2696	15020	0435	00371	1162
0250	1145	35409		2703	15002	0464	00441	1101
0300	0997	35252		2717	14955	0516	00588	0971
0400	0721 B	3500 B		2741	14865	0602	00893	0743
0500	0563 I	3492 H		2756	14817	0671	01205	0608
*0600	0480 F	3491 F		2765	14800	0728	01525	0522
0700	0459	34952		2771	14808	0778	01862	0476
0800	0448	34966		2773	14820	0826	02228	0463
1000	0409	34941		2775	14837	0919	03087	0454

C-REF-NO 361	YR 1962	DEPTH 2834	WAVES 1 18X2	AIR T 20.6	VIS
CONS. NO 052	MONTH 8	MXSAMPD 10	WAVES 2 18XX	WET B 20.4	STN 052
LAT 42-225N	DAY 09	NO.DPTH 14	WND-DIR - 230	WW-CODE	
LON 61-390W	HR 20.4	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
204	0000	196	32217		2277	15178
204	0048	1757	35690		2592	15169
204	0097	1504	35764		2657	15100
204	0145	1391	35666		2674	15071
204	0193	1318	35611		2685	15054
204	0242	1208	35485		2697	15023
204	0290	1075	35339		2710	14983
204	0387	0828	35091		2732	14905
204	0508	0619	34981		2753	14842
204	0611	0514	34943		2763	14816
204	0714	0475	34957		2769	14817
204	0818	0451	34962		2772	14825
204	0922	0444	34975		2774	14839
204	1026	0415	34947		2775	14844

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1960	32217		2277	15178	0000	00000	5096
0010	1908 C	3297 I		2348	15173	0048	00002	4423
0020	1857 E	3365 I		2412	15169	0089	00008	3812
*0030	1809 H	3425 I		2470	15164	0125	00017	3264
0050	1746	3573 F		2598	15166	0178	00038	2051
0075	1612 D	3596 I		2647	15133	0224	00067	1589
0100	1494	35760		2659	15098	0263	00101	1489
0125	1428 B	3571 B		2670	15080	0299	00143	1390
0150	1383	35661		2675	15069	0333	00192	1347
0175	1345 B	35633		2681	15060	0367	00247	1298
0200	1304	35596		2686	15050	0399	00309	1251
0225	1250	35534		2692	15035	0430	00376	1198
0250	1186	35461		2699	15017	0459	00448	1139
0300	1047	35309		2713	14974	0514	00600	1014
0400	0801	35072		2735	14896	0606	00926	0809
0500	0630	34984		2752	14845	0679	01262	0646
0600	0522	34945		2763	14817	0739	01600	0548
0700	0478	34954		2769	14816	0792	01953	0498
0800	0454	34961		2772	14823	0842	02332	0474
1000	0421	34954		2775	14842	0936	03206	0460

C-REF-NO 361	YR 1962	DEPTH 2926	WAVES 1 35X2	AIR T	VIS
CONS. NO 053	MONTH 8	MXSAMPD 11	WAVES 2 22XX	WET B	STN 053
LAT 42-200N	DAY 10	NO.DPTH 14	WND-DIR 030	WW-CODE	
LUN 61-420W	HR 01.8	W-COLOR	WND-SPD 05	CLO-TPE	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1015.	CLO-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
018	0000	189	32090		2285	15156
018	0069	1566	35648		2634	15114
018	0119	1439	35728		2668	15083
018	0168	1315	35579		2683	15049
018	0218	1196	35455		2697	15015
018	0267	1047	35293		2712	14968
018	0317	0926	35184		2724	14931
018	0416	0663	34949		2745	14844
018	0589	0503	34943		2765	14808
018	0683	0468	34957		2770	14809
018	0780	0445	34954		2772	14816
018	0877	0434	34958		2774	14827
018	0974	0420	34959		2775	14838
018	1072	0404	34947		2776	14847

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1890	32090		2285	15156	0000	00000	5019
0010	1840 B	3270 I		2344	15151	0048	00002	4458
0020	1791 C	3326 I		2398	15145	0090	00009	3941
*0030	1745 D	3377 I		2448	15139	0127	00018	3467
*0050	1659 E	3464 I		2535	15127	0188	00042	2648
0075	1548	3572 H		2644	15110	0242	00075	1626
0100	1482 B	3584 I		2667	15095	0280	00109	1408
0125	1424	35715		2671	15079	0316	00150	1382
0150	1360	3565 C		2679	15061	0350	00197	1312
0175	1299	35562		2685	15044	0382	00251	1259
0200	1240	35500		2692	15028	0413	00311	1198
0225	1175	35431		2699	15008	0442	00375	1133
0250	1099	35348		2707	14985	0470	00442	1063
0300	0966	35218		2720	14943	0521	00584	0943
0400	0702 B	34982		2742	14857	0605	00883	0732
0500	0554 E	3491 E		2756	14813	0672	01191	0600
0600	0498	34945		2766	14807	0729	01508	0518
0700	0463	34957		2770	14810	0779	01843	0478
0800	0442	34955		2773	14818	0827	02211	0465
1000	0416	34955		2776	14840	0920	03070	0452

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DATA RECORD
BAFFIN BAY
Smith Sound to Strait of Belle Isle
September 4 to October 24, 1964
No. 11
1965 Data Record Series

Canadian Oceanographic Data Centre

Programmed by the
Canadian Committee on Oceanography

1965

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ERRATA

TO

Publication No. 7 1965 Data Record Series

P. O. G. Cruise: P-64-3

Ocean Weather Station "P" North Pacific Ocean

August 7 - October 31, 1964.

Second flyleaf: Name following "Observer"

Should read: Mr. H. Wilke

At bottom of Page: Place name

Spelled incorrectly: Should read Nanaimo, B. C.

Inside back cover:

Printed Publications of the Canadian
Oceanographic Data Centre in the 1965
Data Record Series.

No. 3 Ocean Weather Station "P" CODC Reference
02-64-006 should read: 02-64-004.

BAFFIN BAY
Smith Sound to Strait of Belle Isle
September 4 to October 24, 1964

CODC Reference: 10-64-020

No. 11

1965 Data Record Series

Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography

DEPARTMENT OF MINES AND TECHNICAL SURVEYS

BAFFIN BAY, SMITH SOUND to STRAIT OF BELLE ISLE

Ship:	CCGS "LABRADOR"
Local cruise designation:	Lab 13-64
Cruise period:	September 4 - October 24, 1964
Observers:	A. E. Collin Scientist-in-Charge J. I. Marlowe D. L. Barrett A. C. Grant R. S. Hiltz

MARINE SCIENCES BRANCH

Bedford Institute of Oceanography, Dartmouth, N. S.

SECTION I

Description of data collection procedures

"LABRADOR"

50

Canadian Coast Guard Service

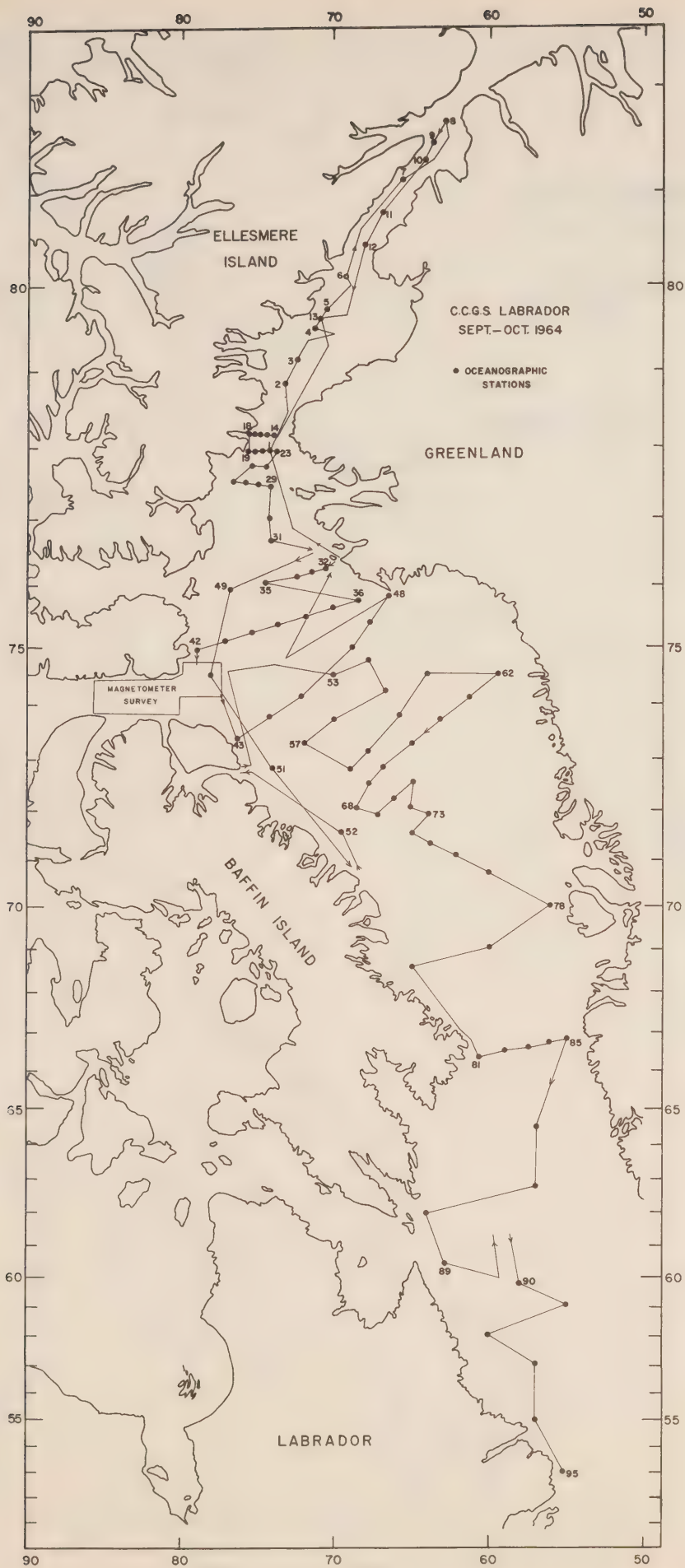


FIGURE 1. TRACK CHART



FIGURE 2. MAGNETOMETER SURVEY



FIGURE 3. GEOLOGICAL INVESTIGATION

INTRODUCTION

The object of this cruise was to complete an integrated program of physical oceanography, geological sampling and magnetic measurements in Nares Strait, northern Baffin Bay and Lancaster Sound. Temperature and salinity measurements were recorded between Smith Sound and the Strait of Belle Isle for the ice forecast program of the U. S. Naval Oceanographic Office. Plankton samples were collected at a number of stations for the Fisheries Research Board, and water samples were drawn for deuterium analysis by the Woods Hole Oceanographic Institution.

EXTRACT OF CRUISE LOG

4 September 1964	Departed Thule
5 September 1964	Occupied station 1
14 - 18 September 1964	Magnetometer survey of Lancaster Sound completed
28 September - October 1964	Baffin Bay survey completed
20 - 22 October 1964	Ice forecast stations completed for USNOO
24 October 1964	Arrived Halifax.

OBSERVATIONAL PROCEDURES

95 oceanographic stations were occupied employing Knudsen water bottles at standard depths to bottom. Samples for surface temperature, salinity and oxygen were obtained in a surface bottle, and temperature was measured with a mercury thermometer graduated in 0.1°C intervals.

Geological samples were collected by corer and snapper at stations in central Baffin Bay, Hall Basin, Kennedy Channel and Kane Basin.

A concentrated magnetic survey was carried out in and at the entrance to Lancaster Sound. A total of 1340 nautical miles of magnetic profiling was obtained in Baffin Bay and Davis Strait.

Meteorological observations were made by the ship's officer on watch.

LABORATORY PROCEDURES

Dissolved oxygen content was determined at all depths on 48 stations, and at depths beginning at 500 metres on 8 deep stations in central Baffin Bay. All samples were analysed by the modified Winkler technique.

The salinity determinations were made on the N. I. O. conductivity bridge No. 3, at the Bedford Institute of Oceanography.

BATHYTHERMOGRAPH DATA

A total of 95 bathythermographs was taken and processed at The Bedford Institute of Oceanography.

PERSONNEL

At Sea:

A. E. Collin	Scientist in Charge
J. I. Marlowe	
D. L. Barrett	
A. C. Grant	
R. S. Hiltz	
W. Young	
R. A. Stewart	
S. W. Dorey	

Data Analyses

Oceanographic Data:	A. E. Collin M. E. MacLean
Salinity determinations:	M. E. MacLean
Geophysical data:	D. L. Barrett
Geological samples:	J. I. Marlowe

SECTION II

Description of the machine-generated data record

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an "estimate of precision" for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** (σ) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under "GENERAL INFORMATION" in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an "**interpolation error estimate**" derived from the particular interpolation formula used. There are two purposes in stating the error estimates; first, to give an indication of the quality of the interpolated data; **second**, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T, S, O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the "measurement error estimate" comprises the "**combined measurement and interpolation error estimate**". It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

VESSEL		9 NO. DEPTHS OBS'D.		7 DEPTH — TO BOTTOM		6 TIME HOURS G.M.T. 10		5 DATE YEAR MONTH DAY		3 LONGITUDE (W = +) — DEG. 0 MIN. 10		2 LATITUDE (N = +) — DEG. 0 MIN. 10		1 IDENT. CODE COUNTRY INST.													
ENTERED BY		CHECKED BY																									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15														19 20 21 22 23 24 25 26 27 28 29 30 31 34 35													
10 WATER		11 WAVES I DW DPW HW		12 WAVES II DW DPW HW		13 WIND DIR. <i>100</i>		14 BAROMETER		15 AIR TEMP. 1 10		16 WET BULB 1 10		17 W.W. CODE 1 (SEPT. 62)		18 CLOUD 1 10		19 HOURS AFTER H.W.		21 UNASSIGNED		22 CRUISE REFERENCE NUMBER		23 CONSEC. NUMBER		24 OW DATA VAL	
36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80														1													

OBSERVED		6 TIME HOURS G.M.T. 10		7 DEPTH OF SAMPLE		8 TEMPERATURE ↑ °C		9 SALINITY ↓ ‰		10 OXYGEN e		13 PO ₄ - P ↓		14 TOTAL - P ↓		15 NO ₂ - N ↓		16 NO ₃ - N ↓		17 SIO ₃ - SI ↓		18 p.H. ↓		3	
1																								3	
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79																								3	
80																								3	

* COLUMNS 1-24 AS ON MASTER

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ = Standard deviation of the combined error estimates at standard oceanographic depth,
 ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $1/3 (\bar{V}_{i_1} - V_{i_2})$
 γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) ww-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

- (1) CRUISE REFERENCE NUMBER: Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.
- (2) CONSECUTIVE NUMBER: Indicates the chronological order in which the stations were occupied.
- (3) LATITUDE: Indicate the position of the platform at the time of observation.
- (4) LONGITUDE:
- (5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).
- (6) YEAR:
- (7) MONTH:
- (8) DAY:
- (9) HOUR: The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1). If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.
- (10) COUNTRY / INSTITUTE: The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.
- (11) DEPTH: The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".
- (12) MAXIMUM SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).
- 00 m - 50 m = 00
- 51 m - 150 m = 01
- 151 m - 250 m = 02
- etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: The Forel-Ule Code (see table 2 and NOTE under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;

NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.

- (16) WAVES 1
($d_W d_W P_W H_W$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_W d_W P_W H_W$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE (WND-FCE): Beaufort notation (See Table 6).
- WIND SPEED (WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO_4	(9) -P-	(10) NO_2	(11) NO_3	(12) SiO_2
				(13) pH.	

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

- (1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.
- When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.
- (2) DEPTH: The depth in metres at the reversal time of deepest cast.
- (3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.
- (4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 C1\%$, reported in:
- 1/100 parts per 1000, or
 - 1/1000 parts per 1000.
- In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).
- In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.
- (5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places. An alphabetical character following the value is the measurement error estimate as referred to under (3).
- (6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).
- (7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

- (8) PO₄ Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
- (9) -P- Total Phosphorus reported to hundredths of microgram-atoms per litre.
- (10) NO₂ Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
- (11) NO₃ Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
- (12) SiO₂ Silicate-Silicon reported in whole microgram-atoms per litre.
- (13) pH The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

(1) DEPTH	(2) TEMP	(3) SAL	(4) OXYGEN	(5) SGMT	(6) SOUND
(7) DELTA-D	(8) POT-EN	(9) SVA.			

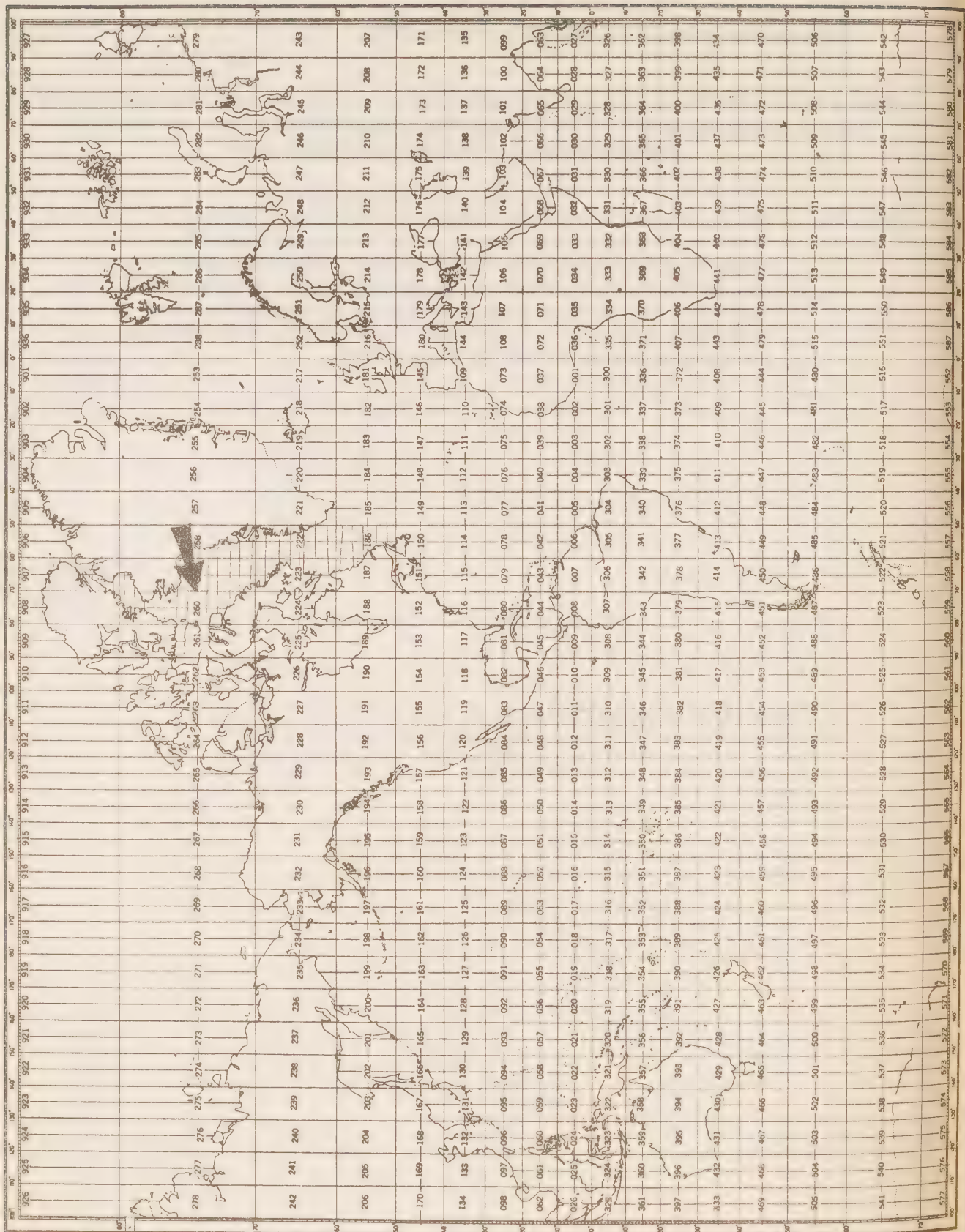
- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY: A. The reported salinity values are measured to three decimal places.
 (i) the interpolation error estimate is less than twice the standard deviation of measurement
 —the interpolated value is reported to three decimal places (e.g., 30.139).
 (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 —the interpolated value is reported to two decimal places, and followed by the interpolation error estimate (e.g., 29.23 C).
 B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 —the interpolated value is reported to two decimal places, and followed by the combined measurement and interpolation error estimate (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "Introduction" to section II of the data record).

- (5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.
- (6) SOUND
VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).
- (7) DELTA-D: The geo-potential anomaly as defined by:
- $$\Delta D = \int_0^P \delta dp$$
- ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).
- (8) POTENTIAL
ENERGY
ANOMALY: The Potential energy anomaly χ as defined by:
- $$\chi = 1/g \int_0^P p \delta dp = \int_0^Z \rho p \delta dz$$
- χ is expressed in units of 10^8 ergs/cm² and recorded to two decimal places (e.g., 116.44).
- (9) SPECIFIC
VOLUME
ANOMALY: The specific volume anomaly as defined by:
- $$\delta = \alpha - \alpha_{35.0.P}$$
- δ is expressed in ml/gr, and conventionally reported as $10^4 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs

* (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval**. The **third**, and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two interpolations between the last two observed depths.



MARSDEN SQUARE CHART

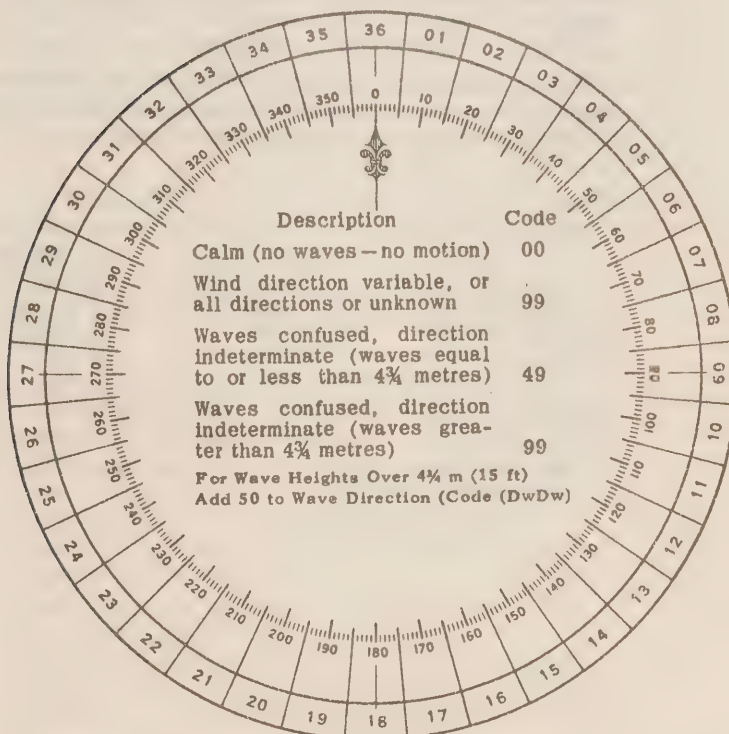
Table 1
CONVERSION
MINUTES TO $\frac{1}{4}_0$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (P_w)
(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (H_w)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code			Code
0	Less than ¼ m (1 ft)	Add 50 to Dw Dw	0 5 m (16 ft)
1	½ m (1½ ft)		1 5½ m (17½ ft)
2	1 m (3 ft)		2 6 m (19 ft)
3	1½ m (5 ft)		3 6½ m (21 ft)
4	2 m (6½ ft)		4 7 m (22½ ft)
5	2½ m (8 ft)		5 7½ m (24 ft)
6	3 m (9½ ft)		6 8 m (25½ ft)
7	3½ m (11 ft)		7 8½ m (27 ft)
8	4 m (13 ft)		8 9 m (29 ft)
9	4½ m (14 ft)		9 9½ m (30½ ft) or more
x	Height not determined		

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww			
No meteors except photometeors	00	Cloud development not observed or not observable	characteristic change of the state of sky during the past hour
	01	Clouds generally dissolving or becoming less developed	
	02	State of sky on the whole unchanged	
	03	Clouds generally forming or developing	
Haze, dust, sand or smoke	04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes	
	05	Haze	
	06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
	07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
	08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
	09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
	10	Mist	
	11	Patches of	shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea
	12	More of less continuous	
	13	Lightning visible, no thunder heard	
	14	Precipitation within sight, not reaching the ground or the surface of the sea	
	15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station	
	16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station	
	17	Thunderstorm, but no precepitation at the time of observation	
	18	Squalls	at or within sight of the station during the preceding hour or at the time of observation
	19	Funnel clouds	
ww = 20 - 29			
		Precipitation, fog, ice fog or thunderstorm the station during the preceding hour but not the time of observation	
	20	Drizzle (not freezing) or snow grains	not falling shower(s)
	21	Rain (not freezing)	
	22	Snow	
	23	Rain and snow or ice pellets, type (a)	
	24	Freezing drizzle or freezing rain	
	25	Shower(s) of rain	
	26	Shower(s) of snow, or of rain and snow	
	27	Shower(s) of hail, or of rain and hail	
	28	Fog or ice fog	
	29	Thunderstorm (with or without precipitation)	
ww = 30 - 39			
		Duststorm, sandstorm, drifting or blowing snow	
	30		-has decreased during the preceding hour
	31	Slight or moderate duststorm or sandstorm	-no appreciable change during the preceding hour
	32		-has begun or has increased during the preceding hour
	33		-has decreased during the preceding hour
	34	Severe duststorm or sandstorm	-no appreciable change during the preceding hour
	35		-has begun or has increased during the preceding hour
	36	Slight or moderate blowing snow	generally low (below eye level)
	37	Heavy drifting snow	
	38	Slight or moderate blowing snow	generally high (above eye level)
	39	Heavy blowing snow	
ww = 40 - 49			
		Fog or ice fog at the time of observation	
	40	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to level above that of the observer	
	41	Fog or ice fog in patches	
	42	Fog or ice fog, sky visible	has become thinner during the preceding hour
	43	Fog or ice fog, sky invisible	
	44	Fog or ice fog, sky visible	no appreciable change during the preceding hour
	45	Fog or ice fog, sky invisible	
	46	Fog or ice fog, sky visible	has begun or has become thicker during the preceding hour
	47	Fog or ice fog, sky invisible	
	48	Fog, depositing rime, sky visible	
	49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle		ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm	
50	Drizzle, not freezing, intermittent	80	Rain shower(s), slight
51	Drizzle, not freezing, continuous	81	Rain shower(s), moderate or heavy
52	Drizzle, not freezing, intermittent	82	Rain shower(s), violent
53	Drizzle, not freezing, continuous	83	Shower(s) of rain and snow mixed, slight
54	Drizzle, not freezing, intermittent	84	Shower(s) of rain and snow mixed, moderate or heavy
55	Drizzle, not freezing, continuous	85	Snow shower(s), slight
56	Drizzle, freezing, slight	86	Snow shower(s), moderate or heavy
57	Drizzle, freezing, moderate or heavy (dense)	87	Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed
58	Drizzle and rain, slight	88	Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder
59	Drizzle and rain, moderate or heavy	89	Slight rain at time of observation
ww = 60 - 69 Rain		90	Moderate or heavy rain at time of observation
60	Rain, not freezing, intermittent	91	Slight snow, or rain and snow mixed or hail at time of observation
61	Rain, not freezing, continuous	92	Moderate or heavy snow, or rain and snow mixed or hail at time of observation
62	Rain, not freezing, intermittent	93	Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation
63	Rain, not freezing, continuous	94	Thunderstorm, slight or moderate, with hail at time of observation
64	Rain, not freezing, intermittent	95	Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation
65	Rain, not freezing, continuous	96	Thunderstorm, combined with duststorm or sandstorm at time of observation
66	Rain, freezing, slight	97	Thunderstorm, heavy, with hail at time of observation
67	Rain, freezing, moderate or heavy	98	
68	Rain or drizzle and snow, slight	99	
69	Rain or drizzle and snow, moderate or heavy		
70 - 79 Solid precipitation not in showers			
ww			
70	Intermittent fall of snow flakes		
71	Continuous fall of snow flakes		
72	Intermittent fall of snow flakes		
73	Continuous fall of snow flakes		
74	Intermittent fall of snow flakes		
75	Continuous fall of snow flakes		
76	Ice prisms (with or without fog)		
77	Snow grains (with or without fog)		
78	Isolated starlike snow crystals (with or without fog)		
79	Ice pellets, type (a)		

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{3}{4}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N. B.
04. Arctic Biological Station, St. Anne de Bellevue, P. Q.
05. Biological Station, St. John's, Nfld.
06. Station de Biologie Marine, Grande Riviere, P. Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N. S.
09. Pacific Naval Laboratory, Esquimalt, B. C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION III

Serial oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Bedford Institute of Oceanography
<u>Observation platform:</u>	CCGS "Labrador"
<u>Vessel's cruising speed:</u>	12 knots
<u>Total number of stations occupied:</u>	95
<u>Anemometer height above sea level:</u>	20 metres
<u>Barometer readings</u>	Aneroid Barometer (corrected)
<u>Air temperature</u>	Sling Psychrometer
<u>Wet bulb temperature</u>	Sling Psychrometer
<u>Surface sea water temperature</u>	Reversing bottle

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature	0.02
Salinity	0.003
Oxygen	0.05

C-REF-NO 020	YR 1964	DEPTH 658	WAVES 1 3124	AIR T -03.2	VIS 7
CONS. NO 001	MONTH 9	MXSAMPD 06	WAVES 2 31XX	WET B -03.6	STN
LAT 77-565N	DAY 05	NO.DPTH 15	WND-DIR 300	WW-CODE 02	
LON 74-122W	HR 15.0	W-COLOR	WND-SPD 18	CLD-TPE 0	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1012.9	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
156	0000	-0070 B	32519	837	2616	14426
156	0005	-0073	32577	835	2620	14426
156	0009	-0073	32425	836	2608	14425
156	0018	-0073	32425	840	2608	14426
156	0026	-0072	32431	836	2609	14428
156	0044	-0087	32853	800	2643	14430
156	0066	-0124	33355	753	2685	14423
156	0088	-0127	33690	705	2712	14430
150	0125	-0123	33805	686	2721	14440
150	0163	-0091	33980	647	2734	14464
150	0212	-0070	34047	650	2739	14482
150	0256	-0057	34137	645	2746	14497
150	0356	-0043	34279	652	2757	14522
150	0454	-0041	34375	666	2764	14541
150	0573	-0036	34398	663	2766	14563

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0070 B	32519	837	2616	14426	0000	00000	1867
0010	-0073	3241 C	837	2607	14425	0019	00001	1947
0020	-0073	32421	840	2608	14427	0039	00004	1940
0030	-0074	3250 F	830	2614	14429	0058	00009	1878
0050	-0098 B	3300 B	787	2655	14428	0092	00022	1487
0075	-0128	33514	732	2698	14425	0124	00043	1082
0100	-0128	3376 H	696	2717	14433	0149	00065	0896
0125	-0123	33805	686	2721	14440	0171	00090	0858
0150	-0103 B	3392 B	659	2730	14455	0192	00119	0774
0175	-0084	3400 B	645	2736	14469	0211	00150	0719
0200	-0074	3404 B	647	2738	14479	0228	00185	0696
0225	-0066	34073	649	2741	14487	0246	00222	0672
0250	-0058	34124	646	2745	14495	0262	00262	0635
0300	-0049	34208	646	2751	14509	0293	00348	0575
0400	-0042	34329	659	2761	14531	0346	00538	0484
0500	-0037	34391	663	2765	14550	0393	00753	0438

C-REF-NO 020	YR 1964	DEPTH	289	WAVES 1	XX	AIR T -04.6	VIS	8
CONS. NO 002	MONTH 9	MXSAMPD	03	WAVES 2	XX	WET B -04.9	STN	
LAT 78-525N	DAY 06	NO.DPTH	11	WND-DIR	360	WW-CODE 02		
LON 72-410W	HR 01.9	W-COLOR		WND-SPD	04	CLD-TPE 0		
MARSD SQ 260	C/I 1810	W-TRNSP		BARO	1014.6	CLD-AMT 2	HW	

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
019	0000	-0130 B	30040	1014	2417	14363
019	0010	-0137	30044	1036	2417	14362
019	0020	-0126	30658	1053	2467	14377
019	0030	-0154	31591	885	2543	14378
019	0050	-0155	32250	814	2596	14391
019	0075	-0155	33237	738	2676	14409
019	0100	-0150	33280	716	2680	14416
019	0149	-0115	33701	686	2713	14446
019	0196	-0093	33936	667	2731	14468
019	0244	-0080	33996	661	2735	14482
019	0274	-0073	33866	659	2725	14489

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0130 B	30040	1014	2417	14363	0000	00000	3757
0010	-0137	30044	1036	2417	14362	0038	00002	3752
0020	-0126	30658	1053	2467	14377	0073	00007	3280
0030	-0154	31591	885	2543	14378	0102	00015	2555
0050	-0155	32250	814	2596	14391	0149	00033	2046
0075	-0155	33237	738	2676	14409	0191	00059	1287
0100	-0150	33280	716	2680	14416	0223	00087	1253
0125	-0133 B	3348 I	699	2695	14430	0252	00121	1105
0150	-0114	33708	685	2713	14447	0278	00157	0934
0175	-0102	33852	674	2724	14459	0300	00194	0827
0200	-0092	33951	666	2732	14469	0320	00233	0755
0225	-0084	3400 B	662	2736	14477	0339	00273	0717
0250	-0078	3396 C	659	2733	14484	0357	00318	0749

C-REF-NO 020	YR 1964	DEPTH 182	WAVES 1 0220	AIR T -05.2	VIS 8
CONS. NO 003	MONTH 9	MXSAMPD 02	WAVES 2 00X0	WET B -05.4	STN
LAT 79-090N	DAY 06	NO.DPTH 10	WND-DIR 020	WW-CODE 02	
LON 72-060W	HR 09.3	W-COLOR	WND-SPD 03	CLD-TPE 0	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1013.2	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
093	0000	-0150	30147	1012	2426	14355
093	0005	-0143	30265	1011	2435	14361
093	0010	-0136	30824	956	2481	14373
093	0020	-0143	31124	996	2505	14376
093	0030	-0145	31656	843	2548	14384
093	0050	-0158	32317	800	2602	14390
093	0075	-0131	32910	733	2649	14415
093	0100	-0132	33261	714	2678	14424
093	0150	-0135	33372	706	2687	14432
093	0180	-0110	33797	672	2720	14455

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0150	30147	1012	2426	14355	0000	00000	3672
0010	-0136	30824	956	2481	14373	0034	00002	3151
0020	-0143	31124	996	2505	14376	0065	00006	2918
0030	-0145	31656	843	2548	14384	0092	00013	2507
0050	-0158	32317	800	2602	14390	0137	00031	1994
0075	-0131	32910	733	2649	14415	0182	00059	1544
0100	-0132	33261	714	2678	14424	0217	00090	1273
0125	-0137 C	3332 I	711 B	2682	14427	0249	00127	1225
0150	-0135	33372	706	2687	14432	0279	00169	1184
0175	-0114	3375 H	676	2717	14452	0305	00213	0898

C-REF-NO 020	YR 1964	DEPTH 180	WAVES 1 0320	AIR T -02.7	VIS 8
CONS. NO 004	MONTH 9	MXSAMPD 01	WAVES 2 0320	WET B -03.0	STN
LAT 79-300N	DAY 06	NO.DPTH 8	WND-DIR 030	WW-CODE 01	
LON 71-000W	HR 16.1	W-COLOR	WND-SPD 05	CLD-TPE 0	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1012.2	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
161	0000	-0136	30119	1001	2423	14361
161	0010	-0127	30849	1038	2482	14378
161	0020	-0141	31516	870	2537	14382
161	0030	-0140	31823	834	2561	14388
161	0050	-0136	32564	765	2621	14404
161	0075	-0120	33234	712	2675	14425
161	0100	-0112 B	33683	689	2711	14439
161	0150	-0078	33959	667	2732	14467

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0136	30119	1001	2423	14361	0000	00000	3695
0010	-0127	30849	1038	2482	14378	0034	00002	3134
0020	-0141	31516	870	2537	14382	0063	00006	2617
0030	-0140	31823	834	2561	14388	0088	00012	2380
0050	-0136	32564	765	2621	14404	0131	00029	1810
0075	-0120	33234	712	2675	14425	0170	00053	1299
0100	-0112 B	33683	689	2711	14439	0198	00078	0956
0125	-0094 B	33929	667	2730	14455	0220	00103	0774
0150	-0078	33959	667	2732	14467	0239	00130	0756

C-REF-NO 020	YR 1964	DEPTH 177	WAVES 1 0320	AIR T -02.7	VIS 9
CONS. NO 005	MONTH 9	MXSAMPD 02	WAVES 2 0320	WET B -03.0	STN
LAT 79-423N	DAY 06	NO.DPTH 9	WND-DIR 030	WW-CODE 02	
LON 70-280W	HR 23.4	W-COLOR	WND-SPD 09	CLD-TPE 3	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1015.2	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
234	0000	-0141	30294	622	2438	14362
234	0010	-0138	30702	333	2471	14370
234	0020	-0138	31055	427	2499	14377
234	0030	-0144	31528	348	2538	14382
234	0050	-0154	32286	268	2599	14392
234	0075	-0143	33119	303	2666	14413
234	0100	-0138	33438	302	2692	14424
234	0150	-0076	34043	250	2739	14469
234	0175	-0024	34493	251	2773	14504

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0141	30294	622	2438	14362	0000	00000	3560
0010	-0138	30702	333	2471	14370	0034	00002	3245
0020	-0138	31055	427	2499	14377	0065	00006	2972
0030	-0144	31528	348	2538	14382	0094	00013	2606
0050	-0154	32286	268	2599	14392	0140	00032	2019
0075	-0143	33119	303	2666	14413	0183	00058	1380
0100	-0138	33438	302	2692	14424	0215	00086	1136
0125	-0115	3372 F	276 B	2714	14443	0241	00116	0927
0150	-0076	34043	250	2739	14469	0261	00145	0693
0175	-0024	34493	251	2773	14504	0274	00166	0373

C-REF-NO 020	YR 1964	DEPTH 293	WAVES 1 0220	AIR T -01.9	VIS 8
CONS. NO 006	MONTH 9	MXSAMPD 03	WAVES 2 XX	WET B -02.5	STN
LAT 80-070N	DAY 07	NO.DPTH 11	WND-DIR 030	MW-CODE 02	
LON 68-550W	HR 04.1	W-COLOR	WND-SPD 07	CLD-TPE 0	
MARSD SQ 907	C/I 1810	W-TRNSP	BARO 1012.2	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
041	0000	-0162	30644	956	2466	14356
041	0010	-0164	30640	964	2466	14357
041	0020	-0158	31009	940	2496	14367
041	0029	-0145	31551	868	2540	14382
041	0049	-0133	32305	790	2600	14402
041	0073	-0103	33454	710	2692	14436
041	0097	-0092	33853	683	2724	14450
041	0146	-0065	34236	679	2754	14477
041	0189	-0021	34539	675	2777	14508
041	0231	-0008	34643	669	2784	14523
041	0266	-0008	34648	670	2785	14528

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0162	30644	956	2466	14356	0000	00000	3286
0010	-0164	30640	964	2466	14357	0033	00002	3288
0020	-0158	31009	940	2496	14367	0065	00006	3004
0030	-0144	3159 B	863	2543	14383	0093	00014	2555
0050	-0132	3236 B	786	2604	14403	0138	00032	1969
0075	-0102	3350 C	706	2696	14437	0177	00055	1098
0100	-0091	3389 B	682	2727	14452	0201	00076	0809
0125	-0078	3411 G	677	2744	14465	0219	00097	0641
0150	-0061	34269	679	2757	14480	0234	00117	0527
0175	-0035 B	3445 B	676	2770	14498	0245	00137	0398
0200	-0015	34581	673	2780	14513	0254	00154	0310
0225	-0009	34637	670	2784	14521	0262	00170	0271
0250	-0005	3466 B	670	2786	14527	0268	00186	0252

C-REF-NO 020	YR 1964	DEPTH 480	WAVES 1 04XX	AIR T -02.5	VIS 8
CONS. NO 007	MONTH 9	MXSAMPD 05	WAVES 2 00X0	WET B -03.1	STN
LAT 81-051N	DAY 07	NO.DPTH 13	WND-DIR 040	WW-CODE 02	
LON 65-150W	HR 14.9	W-COLOR	WND-SPD 08	CLD-TPE 6	
MARSD SQ 907	C/I 1810	W-TRNSP	BARO 1014.6	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0000	-0164	30845	605	2483	14358
149	0010	-0164	30840	685	2482	14360
149	0020	-0160	30920	508	2489	14365
149	0030	-0148	31665	436	2549	14382
149	0049	-0126	32904	660	2649	14413
149	0073	-0104	33598	418	2704	14437
149	0098	-0093	33851	604	2724	14450
149	0146	-0073	34177	574	2750	14472
149	0196	-0055	34335	488	2762	14491
149	0245	-0034	34469	542	2772	14510
149	0294	-0011	34603	599	2781	14531
149	0391	-0011	34711	630	2790	14549
149	0465	-0016	32914	816	2645	14533

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0164	30845	605	2483	14358	0000	00000	3131
0010	-0164	30840	685	2482	14360	0031	00002	3134
0020	-0160	30920	508	2489	14365	0063	00006	3072
0030	-0148	31665	436	2549	14382	0091	00013	2500
0050	-0125	3295 B	652 B	2652	14415	0131	00029	1519
0075	-0103	3363 B	427 C	2706	14439	0163	00049	1003
0100	-0092	33868	608	2725	14451	0186	00069	0822
0125	-0081	34058	622 F	2740	14463	0205	00091	0680
0150	-0072	34193	566	2751	14474	0221	00113	0580
0175	-0063	3428 B	519 C	2758	14483	0235	00136	0516
0200	-0053	34346	490	2762	14492	0247	00160	0470
0225	-0043	34416	512 B	2768	14502	0258	00184	0422
0250	-0031	34484	548	2773	14513	0268	00208	0375
0300	-0010	3465 H	599	2785	14533	0284	00253	0257
0400	-0005 D	3426 I	689 I	2753	14547	0325	00409	0560

C-REF-NO 020	YR 1964	DEPTH 622	WAVES 1 00X0	AIR T -03.5	VIS 8
CONS. NO 008	MONTH 9	MXSAMPD 05	WAVES 2 00X0	WET B -04.0	STN
LAT 81-450N	DAY 07	NO.DPTH 16	WND-DIR CALM	WW-CODE 03	
LON 62-110W	HR 22.2	W-COLOR	WND-SPD 00	CLD-TPE 6	
MARSD SQ 907	C/I 1810	W-TRNSP	BARO 1013.5	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
229	0000	-0163	30549	940	2459	14355
229	0010	-0163	30554	947	2459	14356
229	0019	-0164	30614	950	2464	14358
229	0029	-0163	30886	932	2486	14364
229	0048	-0132	32207	820	2592	14401
229	0073	-0103	33367	723	2685	14435
229	0097	-0085	33872	700	2725	14454
222	0144	-0059	34309	766	2760	14480
222	0145	-0059	34296	682	2759	14480
222	0179	-0038	34459	679	2771	14498
222	0216	-0027	34539	630	2777	14510
222	0294	0002	34693	665	2788	14538
222	0380	0008	34724	670	2790	14556
222	0416	0010	34714	670	2789	14562
222	0470	0012	34750	671	2792	14573
222	0489	0015	34774	671	2794	14578

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0163	30549	940	2459	14355	0000	00000	3360
0010	-0163	30554	947	2459	14356	0034	00002	3355
0020	-0164	30630	949	2465	14359	0067	00007	3295
0030	-0162	3095 D	927	2491	14366	0099	00015	3050
0050	-0129	32324	810	2602	14404	0150	00035	1996
0075	-0101	3342 B	719	2690	14436	0190	00059	1159
0100	-0083	33907	704 B	2728	14456	0214	00080	0796
0125	-0070	3416 B	726 I	2748	14470	0232	00100	0610
0150	-0056	3434 B	720 I	2762	14483	0246	00120	0478
0175	-0041	34448	687 B	2770	14496	0257	00138	0399
0200	-0031	3451 B	652	2775	14505	0266	00156	0355
0225	-0023	34560	630 B	2778	14513	0275	00175	0321
0250	-0013 B	3462 B	636 C	2782	14523	0282	00193	0285
0300	0003	34699	666	2788	14540	0295	00230	0230
0400	0009	34718	670	2789	14559	0318	00311	0219

C-REF-NO 020	YR 1964	DEPTH 420	WAVES 1 0020	AIR T -03.3	VIS B
CONS. NO 009	MONTH 9	MXSAMPD 03	WAVES 2 00X0	WET B -03.9	STN
LAT 81-350N	DAY 08	NO.DPTH 12	WND-DIR 180	WW-CODE 01	
LON 62-520W	HR 02.1	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 907	C/I 1810	W-TRNSP	BARO 1012.5	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
021	0000	-0159	30443	942	2450	14355
021	0009	-0157	30550	936	2459	14359
021	0018	-0164	30799	941	2479	14361
021	0028	-0165	30790	942	2478	14362
021	0046	-0150	31589	865	2543	14383
021	0069	-0128	32818	765	2642	14414
021	0092	-0094	33760	709	2717	14447
021	0138	-0067	34441	696	2771	14477
021	0160	-0048 B	34596	689	2782	14492
021	0195	-0023	34709	678	2790	14511
021	0243	-0017	34838	676	2800	14523
021	0308	-0006	34786	674	2796	14538

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0159	30443	942	2450	14355	0000	00000	3442
0010	-0158	3058 B	936	2461	14359	0034	00002	3335
0020	-0165	3080 F	943	2479	14361	0067	00007	3166
0030	-0164	3085 E	936	2483	14363	0098	00015	3125
0050	-0147	3181 D	846	2560	14388	0154	00037	2391
0075	-0119	33097	747	2664	14424	0202	00066	1404
0100	-0088 B	3395 I	702	2732	14454	0229	00089	0758
0125	-0073 C	3435 I	693 B	2764	14471	0244	00106	0457
0150	-0057	34536	692	2778	14485	0254	00120	0325
0175	-0036 B	3466 B	684	2787	14501	0261	00132	0243
0200	-0022	34726	677	2792	14512	0267	00143	0196
0225	-0017 B	3480 B	676	2797	14519	0271	00152	0143
0250	-0009 D	3482 E	673	2799	14528	0274	00160	0130
0300	-0005	34799	673	2797	14537	0282	00180	0149

C-REF-NO 020	YR 1964	DEPTH 571	WAVES 1 0020	AIR T -04.8	VIS 8
CONS. NO 010	MONTH 9	MXSAMPD 06	WAVES 2 00X0	WET B -04.8	STN
LAT 81-188N	DAY 08	NO.DPTH 14	WND-DIR 220	WW-CODE 03	
LON 63-210W	HR 05.8	W-COLOR	WND-SPD 06	CLD-TPE 5	
MARSD SQ 907	C/I 1810	W-TRNSP	BARO 1012.2	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
058	0000		30531	926		
058	0008	-0166	30558	915	2460	14355
058	0017	-0166	30762	920	2476	14359
058	0025	-0165	30903	930	2487	14363
058	0041	-0159	31294	884	2519	14374
058	0062	0149 B	30697	849	2459	14511
058	0083		33509	687		
058	0140	-0061	34391	677	2766	14480
058	0178	-0031	34707	673	2791	14504
058	0223	-0014	34864	672	2802	14522
058	0273	0009	34729	655	2790	14538
058	0376	0014	34770	662	2793	14558
058	0490	0019	34939	672	2807	14582
058	0553	0019		670		

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000		30531	926					
0010	-0166	3060 B	915	2463	14355	0034	00002	3321
0020	-0166	30815	925	2480	14360	0066	00007	3152
0030	-0174 G	3106 I	919 B	2500	14361	0097	00014	2963
0050	-0038 I	3091 I	875 B	2484	14427	0158	00040	3111
0075	0175 I	3232 I	751 C	2586	14547	0224	00080	2145
0100	0157 D	3431 I	651 G	2748	14571	0259	00109	0618
0125	0048 I	34661	649 G	2783	14531	0270	00122	0285
0150	-0057 C	34493	676	2774	14485	0278	00133	0358
0175	-0035 B	34689	673	2789	14502	0286	00145	0218
0200	-0022	34815	673	2799	14514	0290	00154	0129
0225	-0013	34861	671	2802	14522	0293	00160	0099
0250	-0001	3481 F	663	2797	14531	0296	00167	0147
0300	0013 B	3471 D	654	2789	14545	0305	00194	0225
0400	0015	3474 I	665	2791	14563	0327	00272	0205
0500	0019		670					

C-REF-NO 020	YR 1964	DEPTH 436	WAVES 1 0030	AIR T -04.9	VIS 7
CONS. NO 011	MONTH 9	MXSAMPD 04	WAVES 2 00X0	WET B -05.2	STN
LAT 80-495N	DAY 08	NO.DPTH 13	WND-DIR 250	WW-CODE 03	
LON 66-470W	HR 13.9	W-COLOR	WND-SPD 04	CLD-TPE 7	
MARSD SQ 907	C/I 1810	W-TRNSP	BARO 1009.8	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
139	0000	-0162	30599	951	2463	14356
139	0010	-0163	30673	964	2469	14358
139	0020	-0162	30664	962	2468	14360
139	0030	-0160	30888	957	2486	14366
139	0049	-0149	31384	885	2526	14381
139	0074	-0137	32488	773	2615	14406
139	0099	-0102	33780	692	2719	14445
139	0148	-0073	34330	673	2762	14474
139	0190	-0026	34502	679	2774	14506
139	0241	-0012	34705	674	2789	14523
139	0288	-0008	34775	671	2795	14534
139	0397	-0002	34820	670	2798	14555
139	0428	-0006	34848	669	2801	14559

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0162	30599	951	2463	14356	0000	00000	3321
0010	-0163	30673	964	2469	14358	0033	00002	3263
0020	-0162	30664	962	2468	14360	0066	00007	3269
0030	-0160	30888	957	2486	14366	0098	00015	3095
0050	-0149	31421	880	2529	14382	0156	00038	2685
0075	-0136	3254 B	769	2620	14408	0213	00073	1823
0100	-0101	3381 C	691	2721	14446	0247	00102	0866
0125	-0085 C	3426 I	669 B	2757	14464	0264	00122	0525
0150	-0071	34341	673	2763	14476	0277	00139	0467
0175	-0042 B	3446 D	676	2771	14495	0288	00157	0392
0200	-0021	34547	678	2777	14510	0297	00175	0333
0225	-0013 B	3465 B	676	2785	14519	0304	00191	0259
0250	-0011	34724	673	2791	14525	0310	00205	0203
0300	-0006	3478 B	671	2795	14537	0319	00231	0162
0400	-0004	3484 C	669	2800	14555	0333	00281	0122

C-REF-NO 020	YR 1964	DEPTH 330	WAVES 1 0020	AIR T -05.1	VIS 8
CONS. NO 012	MONTH 9	MXSAMPD 03	WAVES 2 0020	WET B -05.5	STN
LAT 80-268N	DAY 08	NO.DPTH 12	WND-DIR 270	WW-CODE 02	
LON 68-010W	HR 17.0	W-COLOR	WND-SPD 01	CLD-TPE 7	
MARSD SQ 907	C/I 1810	W-TRNSP	BARO 1009.5	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
170	0000	-0162	31223	911	2513	14365
170	0010	-0157	31303	907	2520	14370
170	0020	-0148	31670	857	2549	14381
170	0030	-0143	32051	753	2580	14390
170	0050	-0136	32248	818	2596	14400
170	0075	-0109	33220	733	2674	14430
170	0100	-0082	33947	699	2731	14457
170	0147	-0044	34445	683	2770	14489
170	0197	-0030	34624	678	2784	14507
170	0242	-0017	34740	665	2793	14522
170	0293	0001	34881	613	2803	14540
170	0310	0003	34385	664	2763	14537

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0162	31223	911	2513	14365	0000	00000	2840
0010	-0157	31303	907	2520	14370	0028	00001	2778
0020	-0148	31670	857	2549	14381	0055	00005	2497
0030	-0143	32051	753	2580	14390	0078	00011	2204
0050	-0136	32248	818	2596	14400	0121	00029	2052
0075	-0109	33220	733	2674	14430	0164	00055	1313
0100	-0082	33947	699	2731	14457	0190	00077	0765
0125	-0059	3430 I	686	2759	14477	0206	00095	0503
0150	-0043	34462	683	2771	14491	0217	00111	0388
0175	-0035	3457 D	680	2780	14500	0226	00126	0308
0200	-0029	34632	678	2784	14508	0233	00140	0264
0225	-0022	34698	672	2789	14516	0239	00153	0217
0250	-0014	3484 I	648 C	2801	14526	0243	00163	0112
0300	0001	3459 I	647 D	2779	14537	0254	00194	0314

C-REF-NO 020	YR 1964	DEPTH 177	WAVES 1 00X0	AIR T -05.5	VIS 8
CONS. NO 013	MONTH 9	MXSAMPD 02	WAVES 2 XX	WET B -05.7	STN
LAT 79-360N	DAY 09	NO.DPTH 9	WND-DIR CALM	WW-CODE 02	
LON 70-390W	HR 00.6	W-COLOR	WND-SPD 00	CLD-TPE 7	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1009.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
006	0000	-0154	30659	970	2467	14360
006	0010	-0160	31069	954	2501	14365
006	0020	-0138	31462	885	2532	14383
006	0030	-0141	31860	844	2564	14388
006	0050	-0153	32704	766	2633	14398
006	0075	-0152	33225	720	2675	14410
006	0100	-0141	33259	697	2678	14420
006	0150	-0075	34073	674	2741	14470
006	0175	-0009	34616	671	2782	14512

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0154	30659	970	2467	14360	0000	00000	3276
0010	-0160	31069	954	2501	14365	0031	00002	2958
0020	-0138	31462	885	2532	14383	0060	00006	2659
0030	-0141	31860	844	2564	14388	0085	00012	2351
0050	-0153	32704	766	2633	14398	0126	00028	1698
0075	-0152	33225	720	2675	14410	0163	00052	1297
0100	-0141	33259	697	2678	14420	0196	00081	1272
0125	-0117 B	3358 I	682	2703	14440	0225	00114	1031
0150	-0075	34073	674	2741	14470	0246	00144	0670
0175	-0009	34616	671	2782	14512	0258	00163	0287

C-REF-NO 020	YR 1964	DEPTH 567	WAVES 1 0321	AIR T -02.3	VIS B
CONS. NO 014	MONTH 9	MXSAMPD 05	WAVES 2 00X0	WET B -03.0	STN
LAT 78-110N	DAY 09	NO.DPTH 14	WND-DIR 030	WW-CODE 01	
LON 73-510W	HR 15.5	W-COLOR	WND-SPD 08	CLD-TPE 1	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1009.1	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
155	0000	-0042	32393		2604	14437
155	0010	-0042	32396		2605	14439
155	0020	-0054	32594		2621	14438
155	0030	-0102	33127		2666	14425
155	0049	-0111	33223		2674	14425
155	0074	-0120	33405		2689	14427
155	0098	-0118	33571		2702	14435
155	0148	-0103	33836		2723	14454
155	0195	-0068	34039		2738	14480
155	0245	-0054	34167		2748	14497
155	0297	-0051	34220		2752	14508
155	0394	-0042	34332		2761	14530
155	0494	-0038	34367		2763	14548
155	0544	-0037	34370		2764	14557

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0042	32393		2604	14437	0000	00000	1974
0010	-0042	32396		2605	14439	0020	00001	1971
0020	-0054	32594		2621	14438	0039	00004	1814
0030	-0102	33127		2666	14425	0055	00008	1389
0050	-0111	33230		2674	14425	0082	00019	1306
0075	-0120	33412		2689	14428	0113	00039	1162
0100	-0118	33583		2703	14435	0141	00063	1031
0125	-0112	33724		2714	14444	0166	00092	0923
0150	-0102	33846		2724	14455	0188	00123	0833
0175	-0083 B	33960		2732	14469	0208	00156	0752
0200	-0066	34056		2740	14483	0226	00191	0686
0225	-0058	34126		2745	14491	0242	00227	0635
0250	-0053	34174		2749	14498	0258	00265	0600
0300	-0051	34224		2752	14508	0287	00348	0562
0400	-0042	34336		2761	14531	0340	00534	0479
0500	-0038	34372		2764	14550	0387	00751	0452

C-REF-NO 020	YR 1964	DEPTH 686	WAVES 1 0121	AIR T -02.3	VIS 8
CONS. NO 015	MONTH 9	MXSAMPD 06	WAVES 2 00X0	WET B -03.0	STN
LAT 78-104N	DAY 09	NO.DPTH 14	WND-DIR 010	WW-CODE 02	
LON 74-108W	HR 17.0	W-COLOR	WND-SPD 06	CLD-TPE 1	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1009.1	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
170	0000	-0154	30188		2429	14354
170	0009	-0152	30252		2435	14357
170	0018	-0149	31431		2530	14377
170	0027	-0138	32004		2576	14391
170	0044	-0136	32496		2616	14402
170	0066	-0130	32946		2652	14415
170	0088	-0121	33282		2679	14427
170	0126	-0129	33598		2705	14434
170	0162	-0112	33794		2720	14451
170	0238	-0056	34100		2743	14494
170	0319	-0051	34221		2752	14511
170	0395	-0044	34306		2759	14528
170	0480	-0038	34375		2764	14546
170	0559	-0036	34398		2766	14561

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0154	30188		2429	14354	0000	00000	3639
0010	-0152	3037 I		2444	14359	0036	00002	3498
0020	-0147	3159 D		2543	14380	0066	00006	2556
0030	-0137	3212 E		2586	14394	0090	00012	2150
0050	-0135	32635		2627	14406	0129	00028	1756
0075	-0126	33097		2664	14420	0169	00053	1402
0100	-0123 B	3341 C		2689	14430	0201	00081	1165
0125	-0129	33593		2704	14434	0229	00113	1019
0150	-0119	33736		2716	14445	0253	00147	0910
0175	-0102 B	33858		2725	14459	0275	00183	0822
0200	-0083 C	33968		2733	14473	0295	00221	0745
*0225	-0065 B	34059		2740	14487	0313	00261	0682
0250	-0054 B	3413 B		2745	14497	0329	00301	0636
0300	-0050 B	3420 B		2751	14509	0360	00387	0578
0400	-0044	34311		2759	14530	0414	00580	0497
0500	-0037	34382		2765	14550	0462	00799	0445

C-REF-NO 020	YR 1964	DEPTH 613	WAVES 1 3620	AIR T -04.8	VIS 8
CONS. NO 016	MONTH 9	MXSAMPD 06	WAVES 2 00X0	WET B -05.0	STN
LAT 78-100N	DAY 09	NO.DPTH 14	WND-DIR 360	WW-CODE 03	
LON 74-310W	HR 18.2	W-COLOR	WND-SPD 05	CLD-TPE 1	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1009.8	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
182	0000	-0153	30443		2450	14358
182	0010	-0154	30379		2445	14358
182	0020	-0152	31093		2503	14371
182	0030	-0147	31375		2525	14379
182	0050	-0146	32089		2583	14393
182	0074	-0129	32900		2648	14416
182	0099	-0122	33176		2670	14427
182	0149	-0125	33612		2706	14440
182	0198	-0099	33857		2725	14464
182	0245	-0072	34073		2741	14487
182	0297	-0061	34174		2749	14502
182	0393	-0044	34288		2757	14528
182	0491	-0039	34358		2763	14547
182	0599	-0035	34391		2765	14568

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0153	30443		2450	14358	0000	00000	3443
0010	-0154	30379		2445	14358	0035	00002	3491
0020	-0152	31093		2503	14371	0067	00007	2940
0030	-0147	31375		2525	14379	0096	00014	2723
0050	-0146	32089		2583	14393	0145	00033	2172
0075	-0129	3292 B		2650	14417	0192	00062	1539
0100	-0122	33186		2671	14428	0228	00095	1333
0125	-0124 B	33424		2691	14434	0259	00130	1149
0150	-0125	33618		2706	14441	0286	00168	0999
0175	-0113	3375 B		2717	14452	0310	00208	0897
0200	-0098	33868		2726	14465	0332	00249	0816
0225	-0083	3399 B		2735	14478	0351	00292	0728
0250	-0070	34086		2742	14489	0369	00334	0658
0300	-0060	34179		2749	14503	0400	00423	0591
0400	-0043	34294		2758	14529	0456	00621	0509
0500	-0037	34364		2763	14550	0505	00846	0458
0600	-0035	34391		2765	14568	0550	01101	0437

C-REF-NO 020	YR 1964	DEPTH 631	WAVES 1 0120	AIR T -04.8	VIS 8
CONS. NO 017	MONTH 9	MXSAMPD 06	WAVES 2 00X0	WET B -05.0	STN
LAT 78-103N	DAY 09	NO.DPTH 14	WND-DIR 010	WW-CODE 02	
LON 75-000W	HR 19.6	W-COLOR	WND-SPD 06	CLD-TPE 1	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1010.8	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
196	0000	-0153	30409		2447	14357
196	0010	-0158	30522		2456	14358
196	0020	-0161				
196	0030	-0144	31037		2498	14375
196	0050	-0149	31622		2545	14385
196	0075	-0131	32630		2626	14411
196	0100	-0118	33083		2663	14428
196	0150	-0094	33803		2720	14458
196	0200	-0077	33967		2733	14476
196	0250	-0071				
196	0300	-0066	34138		2746	14500
196	0400	-0054	34262		2756	14524
196	0500	-0044	34357		2763	14547
196	0608	-0039	34361		2763	14567

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0153	30409		2447	14357	0000	00000	3469
0010	-0158	30522		2456	14358	0034	00002	3380
0020	-0161	3075 D		2475	14362	0068	00007	3202
0030	-0144	31037		2498	14375	0099	00015	2984
0050	-0149	31622		2545	14385	0154	00037	2531
0075	-0131	32630		2626	14411	0208	00070	1759
0100	-0118	33083		2663	14428	0248	00106	1414
0125	-0105	3349 D		2696	14444	0280	00142	1102
0150	-0094	33803		2720	14458	0305	00176	0869
0175	-0084	3392 G		2730	14468	0325	00211	0780
0200	-0077	33967		2733	14476	0345	00248	0748
0225	-0073	3402 B		2737	14483	0363	00288	0707
0250	-0071	3407 B		2741	14489	0380	00330	0672
0300	-0066	34138		2746	14500	0413	00422	0620
0400	-0054	34262		2756	14524	0471	00628	0528
0500	-0044	34357		2763	14547	0521	00857	0460
0600	-0039	34362		2763	14565	0567	01119	0456

C-REF-NO 020	YR 1964	DEPTH 262	WAVES 1 0420	AIR T -05.0	VIS 8
CONS. NO 018	MONTH 9	MXSAMPD 03	WAVES 2 00X0	WET B -05.3	STN
LAT 78-100N	DAY 09	NO.DPTH 11	WND-DIR 040	WW-CODE 01	
LON 75-280W	HR 21.3	W-COLOR	WND-SPD 05	CLD-TPE 1	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1011.5	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
213	0000	-0155	30674		2469	14360
213	0010	-0157	30689		2470	14361
213	0020	-0157	30738		2474	14363
213	0030	-0142	31032		2497	14376
213	0050	-0141	31910		2568	14392
213	0075	-0123	32808		2641	14418
213	0100	-0116	33384		2687	14433
213	0150	-0099	33669		2710	14453
213	0200	-0078	34074		2742	14477
213	0250	-0070	34092		2743	14489
213	0260	-0067	34117		2745	14493

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0155	30674		2469	14360	0000	00000	3264
0010	-0157	30689		2470	14361	0033	00002	3251
0020	-0157	30738		2474	14363	0065	00007	3213
0030	-0142	31032		2497	14376	0096	00015	2988
0050	-0141	31910		2568	14392	0150	00036	2311
0075	-0123	32808		2641	14418	0199	00066	1624
0100	-0116	33384		2687	14433	0235	00097	1184
0125	-0108	3359 I		2704	14444	0262	00129	1026
0150	-0099	33669		2710	14453	0288	00165	0969
0175	-0088	3389 G		2727	14466	0310	00202	0805
0200	-0078	34074		2742	14477	0329	00237	0666
0225	-0074 B	3410 H		2743	14483	0345	00273	0650
0250	-0070	34092		2743	14489	0362	00314	0654

C-REF-NO 020	YR 1964	DEPTH 614	WAVES 1 0120	AIR T -05.2	VIS 9
CONS. NO 019	MONTH 9	MXSAMPD 06	WAVES 2 00X0	WET B -05.4	STN
LAT 77-560N	DAY 10	NO.DPTH 14	WND-DIR 010	WW-CODE 01	
LON 75-400W	HR 00.4	W-COLOR	WND-SPD 06	CLD-TPE 1	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1012.2	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
004	0000	-0159	30241		2434	14352
004	0010	-0158	30551		2459	14359
004	0019	-0160	30777		2477	14362
004	0029	-0154	31207		2512	14373
004	0048	-0142	31721		2553	14389
004	0071	-0138	32400		2608	14404
004	0095	-0111	32992		2655	14429
004	0143	-0119	33548		2700	14441
004	0187	-0084 B	33899		2728	14470
004	0234	-0071	34016		2737	14485
004	0282	-0060	34133		2746	14500
004	0375	-0051	34261		2755	14521
004	0470		34121			
004	0564	-0052	34260		2755	14552

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0159	30241		2434	14352	0000	00000	3598
0010	-0158	30551		2459	14359	0035	00002	3358
0020	-0160	3082 B		2480	14363	0068	00007	3150
0030	-0153	3124 B		2514	14374	0098	00014	2827
0050	-0142	31781		2558	14390	0150	00035	2410
0075	-0134	32510		2617	14408	0204	00069	1850
0100	-0111 B	3307 D		2662	14431	0245	00105	1423
0125	-0114 E	3340 I		2688	14438	0278	00143	1171
0150	-0114 B	33617		2706	14446	0305	00181	1004
0175	-0094 C	33822		2722	14462	0329	00220	0852
0200	-0079 B	3395 C		2731	14475	0349	00259	0764
0225	-0072	3400 B		2736	14483	0368	00300	0721
0250	-0067	34057		2740	14490	0386	00343	0682
0300	-0057	34173		2749	14505	0418	00433	0597
0400	-0047 B	3422 F		2752	14527	0476	00643	0561
0500	-0047	3423 I		2753	14544	0533	00904	0556

C-REF-NO 020	YR 1964	DEPTH 677	WAVES 1 0222	AIR T -05.6	VIS 8
CONS. NO 020	MONTH 9	MXSAMPD 06	WAVES 2 00X0	WET B -05.8	STN
LAT 77-570N	DAY 10	NO.DPTH 14	WND-DIR 020	WW-CODE 03	
LON 75-050W	HR 02.8	W-COLOR	WND-SPD 12	CLD-TPE 7	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1011.9	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
028	0000	-0152	31136		2506	14368
028	0010	-0152	31136		2506	14370
028	0019	-0144	31302		2519	14377
028	0029	-0145	31881		2566	14387
028	0048	-0148	32545		2620	14398
028	0072	-0128	32891		2648	14416
028	0096	-0116	33352		2684	14432
028	0141	-0134	33688		2712	14436
028	0183	-0114	33848		2725	14454
028	0272	-0054	34121		2744	14501
028	0369	-0048	34271		2756	14522
028	0465	-0044	34336		2761	14540
028	0559	-0035				
028	0625	-0033				

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0152	31136		2506	14368	0000	00000	2909
0010	-0152	31136		2506	14370	0029	00001	2908
0020	-0144	3135 C		2524	14378	0058	00006	2741
0030	-0145	31927		2570	14387	0083	00012	2298
0050	-0147	3258 C		2623	14399	0124	00029	1793
0075	-0126	3295 B		2652	14418	0166	00055	1514
0100	-0117 B	3340 C		2688	14433	0200	00085	1172
0125	-0127 D	3362 G		2706	14435	0227	00116	1000
0150	-0131	33729		2715	14439	0251	00150	0912
0175	-0119	33824		2723	14450	0273	00187	0842
0200	-0101 B	33909		2729	14464	0294	00226	0783
0225	-0084 C	33990		2735	14477	0313	00267	0726
*0250	-0068 C	34064		2740	14490	0330	00311	0677
0300	-0049 B	34177		2749	14509	0363	00401	0598
0400	-0047	3431 B		2759	14528	0418	00597	0494
0500	-0041							
0600	-0034							

C-REF-NO 020	YR 1964	DEPTH 732	WAVES 1 0222	AIR T -05.6	VIS B
CONS. NO 021	MONTH 9	MXSAMPD 07	WAVES 2 00X0	WET B -05.8	STN
LAT 77-572N	DAY 10	NO.DPTH 14	WND-DIR 020	WW-CODE 03	
LON 74-380W	HR 06.0	W-COLOR	WND-SPD 12	CLD-TPE 7	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1011.9	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
060	0000	-0085				
060	0010	-0085	31781		2557	14410
060	0020	-0087				
060	0030	-0144	32612		2625	14398
060	0050	-0081				
060	0075	-0096	33001		2655	14433
060	0100	-0124				
060	0150	-0114				
060	0189	-0085				
060	0237	-0068				
060	0287	-0058	34152		2747	14502
060	0484	-0043	34340		2762	14544
060	0684	-0032	34418		2767	14584
060	0712	-0032	34456		2770	14589

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0085							
0010	-0085	31781		2557	14410	0025	00001	2428
0020	-0087	3217 I		2588	14417	0048	00005	2126
0030	-0144	32612		2625	14398	0067	00010	1773
0050	-0081	3292 I		2648	14435	0101	00023	1558
0075	-0096	33001		2655	14433	0139	00048	1485
0100	-0124	33192		2672	14427	0175	00079	1329
0125	-0126 C	3337 B		2686	14432	0206	00116	1192
0150	-0114	3353 B		2699	14444	0235	00156	1071
0175	-0096	3368 B		2710	14459	0261	00198	0964
0200	-0080	3381 B		2720	14472	0284	00243	0869
0225	-0071	3392 B		2729	14482	0305	00288	0782
0250	-0065	3403 B		2737	14491	0323	00334	0706
0300	-0056	3418 C		2749	14505	0356	00426	0593
0400	-0047 B	3432 I		2760	14528	0411	00620	0491
0500	-0037 D	3450 I		2774	14552	0454	00814	0355
0600	-0032 C	3455 I		2778	14571	0488	01007	0322
*0700	-0032	3447 C		2772	14587	0523	01244	0376

C-REF-NO 020	YR 1964	DEPTH 732	WAVES 1 0122	AIR T -05.6	VIS 8
CONS. NO 022	MONTH 9	MXSAMPD 07	WAVES 2 0122	WET B -05.8	STN
LAT 77-570N	DAY 10	NO.DPTH 13	WND-DIR 010	WW-CODE 03	
LON 74-120W	HR 08.2	W-COLOR	WND-SPD 15	CLD-TPE 3	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1012.2	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
082	0000	-0112	32446		2611	14405
082	0009	-0113	32452		2612	14406
082	0018	-0114	32414		2609	14407
082	0027	-0113	32499		2615	14410
082	0045	-0098	32996		2655	14427
082	0068	-0119	33402		2689	14427
082	0091	-0128	33686		2712	14430
082	0136	-0126				
082	0171	-0083				
082	0257	-0071				
082	0435	-0046	34264		2756	14534
082	0634	-0035	34387		2765	14573
082	0654	-0035	34383		2765	14577

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0112	32446		2611	14405	0000	00000	1911
0010	-0113	32446		2611	14406	0019	00001	1910
0020	-0114	32423		2609	14407	0039	00004	1926
0030	-0110	3257 E		2621	14413	0057	00009	1812
0050	-0101 B	3310 B		2664	14428	0090	00022	1409
0075	-0123	33497		2696	14427	0121	00041	1097
0100	-0131	3385 I		2725	14433	0146	00063	0821
0125	-0130	3417 I		2751	14442	0163	00083	0579
0150	-0110 B	3444 I		2772	14459	0175	00099	0379
0175	-0081	3466 I		2789	14480	0183	00112	0220
0200	-0072 E	3484 I		2803	14491	0187	00119	0088
*0225	-0068 E	3497 I		2813	14499	0188	00121	0011
*0250	-0069 B	3505 I		2820	14503	0187	00118	0078
0300	-0064	3509 I		2823	14514	0182	00105	0102
0400	-0050	3461 G		2783	14531	0190	00145	0269
0500	-0043 B	3486 I		2803	14554	0208	00222	0081
0600	-0037	3461 I		2783	14570	0226	00328	0271

C-REF-NO 020	YR 1964	DEPTH 412	WAVES 1 0122	AIR T -05.6	VIS 8
CONS. NO 023	MONTH 9	MXSAMPD 04	WAVES 2 0122	WET B -05.8	STN
LAT 77-570N	DAY 10	NO.DPTH 12	WND-DIR 010	WW-CODE 01	
LON 73-420W	HR 10.3	W-COLOR	WND-SPD 12	CLD-TPE 3	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1011.9	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
103	0000	-0092	32683		2630	14418
103	0010	-0092	32713		2632	14420
103	0019	-0092	32695		2631	14421
103	0029	-0093	32720		2633	14423
103	0049		33098			
103	0072	-0125	33308		2681	14423
103	0096	-0126	33664		2710	14432
103	0143	-0103				
103	0190	-0063	34125		2745	14483
103	0235	-0065	34101		2743	14489
103	0287	-0057	34177		2749	14503
103	0385	-0045	34299		2758	14526

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0092	32683		2630	14418	0000	00000	1734
0010	-0092	32713		2632	14420	0017	00001	1711
0020	-0092	32694		2631	14422	0035	00004	1725
0030	-0094	3274 B		2634	14423	0052	00008	1692
0050	-0108 D	33108		2665	14425	0083	00020	1400
0075	-0126	3335 B		2685	14424	0116	00041	1207
0100	-0125	3371 B		2713	14433	0143	00065	0934
0125	-0115	3392 I		2731	14445	0164	00090	0771
0150	-0096 B	3406 I		2741	14460	0182	00115	0670
0175	-0074 B	3412 F		2745	14475	0199	00142	0630
0200	-0062 B	3412 B		2745	14485	0215	00173	0636
0225	-0063 B	3411 B		2744	14489	0231	00208	0645
0250	-0063	3412 B		2744	14493	0247	00248	0638
0300	-0059 B	3416 F		2748	14504	0279	00336	0605

C-REF-NO 020	YR 1964	DEPTH 329	WAVES 1 0122	AIR T -04.0	VIS 8
CONS. NO 024	MONTH 9	MXSAMPD 03	WAVES 2 0122	WET B -04.4	STN
LAT 77-450N	DAY 10	NO.DPTH 12	WND-DIR 010	WW-CODE 01	
LON 74-170W	HR 12.4	W-COLOR	WND-SPD 14	CLD-TPE 1	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1012.2	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
124	0000	-0110	32291	846	2598	14404
124	0010	-0111		846		
124	0018	-0109		845		
124	0027	-0107		825		
124	0045	-0099	32696	814	2631	14422
124	0068	-0114		737		
124	0091	-0118		706		
124	0134	-0101	33825	677	2722	14452
124	0180	-0081	33974	664	2734	14471
124	0225	-0067	34095	662	2743	14487
124	0274	-0055	34199	660	2751	14502
124	0299	-0052	34211	645	2751	14507

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0110	32291	846	2598	14404	0000	00000	2030
0010	-0111	3242 I	846	2609	14407	0020	00001	1929
0020	-0109	3255 I	841	2619	14412	0039	00004	1833
0030	-0105	3267 I	823	2629	14417	0057	00008	1740
0050	-0102	3277 E	798	2637	14423	0091	00022	1663
0075	-0116	3311 I	725	2665	14425	0130	00047	1392
0100	-0116	3343 I	698	2691	14434	0162	00075	1146
0125	-0106	3373 H	681	2714	14447	0188	00105	0924
0150	-0094	3390 C	671	2728	14459	0209	00135	0798
0175	-0083	3397 B	665	2733	14469	0229	00168	0748
0200	-0074	34031	662	2738	14478	0247	00203	0701
0225	-0067	34095	662	2743	14487	0264	00240	0654
0250	-0060	34157	663	2747	14495	0280	00279	0610
0300	-0052	34211	644	2752	14508	0310	00363	0571

C-REF-NO 020	YR 1964	DEPTH 667	WAVES 1 0323	AIR T -04.6	VIS 8
CONS. NO 025	MONTH 9	MXSAMPD 06	WAVES 2 0323	WET B -05.0	STN
LAT 77-455N	DAY 10	NO.DPTH 15	WND-DIR 030	WW-CODE 03	
LON 75-180W	HR 15.1	W-COLOR	WND-SPD 15	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1012.9	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
151	0000	-0112	31798		2559	14396
151	0010	-0113	31921		2569	14399
151	0019	-0113	31985		2574	14402
151	0029	-0110	32114		2584	14406
151	0048	-0122	32446		2611	14409
151	0072	-0099	32642		2627	14426
151	0096	-0107	32890		2647	14430
151	0144	-0123	33619		2706	14440
151	0187	-0102	33840		2723	14461
151	0226	-0072	34019		2737	14483
151	0268	-0057	34121		2744	14499
151	0357	-0049	34279		2757	14519
151	0448	-0041	34358		2763	14539
151	0542	-0035	34396		2766	14558
151	0600	-0033	34412		2767	14569

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0112	31798		2559	14396	0000	00000	2408
0010	-0113	31921		2569	14399	0024	00001	2313
0020	-0113	31996		2575	14402	0047	00005	2255
0030	-0111	32132		2586	14407	0069	00010	2150
0050	-0120	3247 B		2613	14410	0110	00027	1889
0075	-0099	32669		2629	14427	0155	00056	1738
0100	-0109	3296 D		2652	14430	0196	00092	1515
0125	-0119 B	3334 I		2684	14435	0231	00131	1213
0150	-0121	3366 C		2710	14443	0258	00170	0966
0175	-0110	3380 D		2721	14454	0281	00208	0864
0200	-0092	33905		2728	14468	0302	00248	0789
0225	-0073	34015		2737	14483	0321	00289	0713
0250	-0062	34084		2742	14493	0338	00332	0664
0300	-0052 B	34187		2750	14507	0370	00420	0589
0400	-0045	34324		2760	14529	0424	00613	0486
0500	-0037	34383		2765	14550	0471	00829	0444
0600	-0033	34412		2767	14569	0515	01076	0422

C-REF-NO 020	YR 1964	DEPTH 603	WAVES 1 0320	AIR T -05.1	VIS 8
CONS. NO 026	MONTH 9	MXSAMPD 06	WAVES 2 00X0	WET B -05.4	STN
LAT 77-332N	DAY 10	NO.DPTH 14	WND-DIR 030	WW-CODE 02	
LON 76-025W	HR 18.1	W-COLOR	WND-SPD 11	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1012.9	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
181	0000	-0163	31048	927	2499	14362
181	0010	-0163	31049	928	2499	14363
181	0020	-0163	31159	915	2508	14367
181	0030	-0148	31540	829	2539	14381
181	0050	-0135	31834	865	2562	14394
181	0075	-0115	32223	830	2593	14413
181	0100	-0093	32434	823	2610	14431
181	0150	-0129	33238	732	2676	14433
181	0200	-0110	33810	652	2721	14458
181	0250	-0069	34086	655	2742	14490
181	0300	-0057	34181	660	2749	14505
181	0400	-0045	34311	664	2759	14529
181	0500	-0039	34365	661	2763	14549
181	0600	-0035	34368	621	2763	14568

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0163	31048	927	2499	14362	0000	00000	2975
0010	-0163	31049	928	2499	14363	0030	00002	2973
0020	-0163	31159	915	2508	14366	0059	00006	2887
0030	-0148	31540	829	2539	14381	0087	00013	2596
0050	-0135	31834	865	2562	14394	0137	00033	2371
0075	-0115	32223	830	2593	14413	0193	00069	2075
0100	-0093	32434	823	2610	14431	0243	00114	1919
0125	-0108 G	3282 I	783 B	2641	14433	0288	00164	1618
0150	-0129	33238	732	2676	14433	0324	00216	1288
0175	-0124 B	33557	686	2701	14444	0354	00264	1044
0200	-0110	33810	652	2721	14458	0378	00310	0855
0225	-0089 B	3398 B	648	2734	14475	0398	00353	0734
0250	-0069	34086	655	2742	14490	0415	00396	0659
0300	-0057	34181	660	2749	14505	0447	00485	0591
0400	-0045	34311	664	2759	14529	0502	00680	0496
0500	-0039	34365	661	2763	14549	0550	00901	0456
0600	-0035	34368	621	2763	14568	0596	01162	0454

C-REF-NO 020	YR 1964	DEPTH 658	WAVES 1 3620	AIR T -05.2	VIS B
CONS. NO 027	MONTH 9	MXSAMPD 06	WAVES 2 36X0	WET B -05.5	STN
LAT 77-315N	DAY 11	NO.DPTH 13	WND-DIR 360	WW-CODE 03	
LON 75-240W	HR 00.1	W-COLOR	WND-SPD 14	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1011.5	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
001	0000	-0140	32204		2592	14389
001	0010	-0141	32213		2593	14390
001	0020	-0138	32244		2595	14394
001	0030	-0132	32324		2602	14399
001	0047	-0130	32352		2604	14403
001	0071	-0106	32559		2620	14421
001	0094	-0107	32747		2635	14427
001	0141	-0122	33503		2697	14439
001	0180	-0111	33803		2721	14455
001	0270	-0062	34118		2744	14497
001	0454	-0041	34351		2762	14540
001	0551	-0035	34396		2766	14560
001	0600	-0034	34406		2766	14568

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0140	32204		2592	14389	0000	00000	2089
0010	-0141	32213		2593	14390	0021	00001	2081
0020	-0138	32244		2595	14394	0042	00004	2058
0030	-0132	32324		2602	14399	0062	00009	1997
0050	-0127	3237 B		2606	14406	0102	00026	1959
0075	-0105	32588		2622	14423	0149	00056	1799
0100	-0109	3284 F		2643	14429	0192	00094	1601
0125	-0118 B	3324 I		2676	14435	0229	00136	1291
0150	-0121	3359 B		2704	14442	0258	00176	1022
0175	-0113	3378 B		2719	14452	0282	00216	0881
0200	-0100 B	3390 D		2728	14464	0303	00256	0789
0225	-0087 C	3400 F		2736	14476	0322	00298	0717
*0250	-0073 B	3408 D		2742	14488	0339	00340	0665
0300	-0055 B	3418 C		2749	14506	0371	00429	0592
0400	-0041 C	3432 D		2760	14531	0426	00623	0490
0500	-0038	34378		2764	14550	0473	00841	0447
0600	-0034	34406		2766	14569	0517	01091	0426

C-REF-NO 020	YR 1964	DEPTH 667	WAVES 1 3620	AIR T -03.5	VIS B
CONS. NO 028	MONTH 9	MXSAMPD 06	WAVES 2 3627	WET B -03.8	STN
LAT 77-300N	DAY 11	NO.DPTH 13	WND-DIR 360	WW-CODE 02	
LON 74-420W	HR 02.4	W-COLOR	WND-SPD 14	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1010.8	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
024	0000	-0096	32170		2588	14409
024	0010	-0096	32176		2589	14411
024	0020	-0097	32175		2589	14412
024	0030	-0108	32188		2590	14409
024	0050	-0123	32852		2644	14414
024	0074	-0117	33280		2679	14427
024	0099	-0121	33586		2704	14433
024	0148	-0144	33781		2720	14434
024	0194	-0093	33898		2728	14467
024	0288	-0050	34135		2745	14506
024	0480	-0038	34381		2765	14546
024	0579	-0035	34401		2766	14564
024	0637	-0033	34424		2768	14575

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0096	32170		2588	14409	0000	00000	2127
0010	-0096	32176		2589	14411	0021	00001	2122
0020	-0097	32175		2589	14412	0043	00004	2121
0030	-0108	32188		2590	14409	0064	00010	2108
0050	-0123	32852		2644	14414	0101	00025	1592
0075	-0117	33295		2680	14427	0137	00047	1253
0100	-0122	33593		2704	14433	0166	00072	1022
0125	-0137 D	3373 F		2715	14432	0190	00100	0913
0150	-0142	33787		2720	14435	0213	00132	0864
0175	-0117 D	33854		2725	14452	0234	00167	0820
0200	-0089	33914		2729	14470	0254	00206	0784
0225	-0073 B	33981		2734	14482	0273	00248	0739
*0250	-0061 B	34044		2738	14493	0291	00292	0695
0300	-0048	34159		2747	14509	0324	00385	0612
0400	-0036 D	34315		2759	14533	0380	00584	0498
0500	-0037	34387		2765	14550	0428	00801	0441
0600	-0034	3442 B		2767	14569	0471	01046	0417

C-REF-NO 020	YR 1964	DEPTH 330	WAVES 1 3620	AIR T -03.5	VIS 8
CONS. NO 029	MONTH 9	MXSAMPD 03	WAVES 2 3627	WET B -03.8	STN
LAT 77-285N	DAY 11	NO.DPTH 12	WND-DIR 360	WW-CODE 02	
LON 74-000W	HR 04.2	W-COLOR	WND-SPD 11	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1009.5	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
042	0000	-0070	32259	872	2595	14422
042	0010	-0068	32259	875	2595	14425
042	0020	-0118	32936	826	2651	14413
042	0030	-0129	33164	785	2670	14412
042	0050	-0144	33548	740	2701	14414
042	0075	-0153	33660	738	2710	14416
042	0100	-0150	33719	734	2715	14422
042	0150	-0133	33827	690	2723	14440
042	0200	-0073	33891	670	2727	14477
042	0249	-0060	34025	614	2737	14493
042	0299	-0049	34107	617	2743	14507
042	0324	-0049	34123	615	2744	14512

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0070	32259	872	2595	14422	0000	00000	2067
0010	-0068	32259	875	2595	14425	0021	00001	2067
0020	-0118	32936	826	2651	14413	0039	00004	1531
0030	-0129	33164	785	2670	14412	0053	00007	1353
0050	-0144	33548	740	2701	14414	0078	00017	1053
0075	-0153	33660	738	2710	14416	0103	00033	0963
0100	-0150	33719	734	2715	14422	0127	00054	0917
0125	-0145	33777	714	2720	14429	0149	00080	0873
0150	-0133	33827	690	2723	14440	0171	00111	0836
0175	-0103 D	3386 B	681	2725	14458	0192	00146	0823
0200	-0073	33891	670	2727	14477	0212	00185	0808
0225	-0063 B	3396 B	640 B	2732	14486	0232	00228	0760
0250	-0060	34027	614	2737	14493	0251	00273	0708
0300	-0050	34107	610 B	2743	14507	0285	00370	0651

C-REF-NO 020	YR 1964	DEPTH 457	WAVES 1 0228	AIR T -03.4	VIS 8
CONS. NO 030	MONTH 9	MXSAMPD 04	WAVES 2 0228	WET B -03.8	STN
LAT 77-000N	DAY 11	NO.DPTH 13	WND-DIR 020	WW-CODE 02	
LON 74-050W	HR 08.9	W-COLOR	WND-SPD 14	CLD-TPE 4	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1008.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
089	0000	-0080	32143	833	2586	14416
089	0010	-0080	32133	817	2585	14418
089	0020	-0081	32134	838	2585	14419
089	0030	-0105	32678	695	2630	14417
089	0049	-0108	33058	736	2660	14424
089	0074	-0126	33389	735	2688	14424
089	0100	-0122	33562	706	2702	14433
089	0149	-0112	33803	650	2721	14449
089	0200	-0085	33957	645	2732	14472
089	0247	-0062	34092	610	2742	14493
089	0296	-0054	34175	606	2749	14506
089	0394	-0040	34307	616	2759	14530
089	0431	-0039	34348	617	2762	14537

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0080	32143	833	2586	14416	0000	00000	2152
0010	-0080	32133	817	2585	14418	0022	00001	2159
0020	-0081	32134	838	2585	14419	0043	00004	2158
0030	-0105	32678	695	2630	14417	0063	00009	1732
0050	-0109	33075	737	2662	14424	0095	00022	1426
0075	-0126	33398	734	2688	14424	0128	00043	1172
0100	-0122	33562	706	2702	14433	0155	00068	1046
0125	-0118	33698	674	2712	14441	0181	00096	0942
0150	-0112	33807	650	2721	14449	0203	00128	0859
0175	-0099	3389 B	646	2727	14461	0224	00163	0800
0200	-0085	33957	645	2732	14472	0244	00201	0753
0225	-0072	34033	626	2738	14484	0262	00241	0700
0250	-0061	34098	609	2743	14493	0279	00282	0654
0300	-0053	34181	606	2749	14507	0311	00371	0593
0400	-0041	34315	614	2759	14531	0366	00566	0496

C-REF-NO 020	YR 1964	DEPTH 576	WAVES 1 0128	AIR T -01.9	VIS 8
CONS. NO 031	MONTH 9	MXSAMPD 06	WAVES 2 0128	WET B -02.1	STN
LAT 76-400N	DAY 11	NO.DPTH 14	WND-DIR 010	WW-CODE 01	
LON 74-050W	HR 12.0	W-COLOR	WND-SPD 12	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1006.8	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
120	0000	-0081	31710	880	2551	14410
120	0010	-0137	33037	820	2660	14404
120	0020	-0141	33355	784	2685	14408
120	0030	-0145	33522	745	2699	14410
120	0050	-0146	33672	725	2711	14415
120	0075	-0135	33747	693	2717	14425
120	0100	-0137	33788	696	2720	14429
120	0150	-0101	33871	665	2726	14455
120	0199	-0029	34006	609	2734	14499
120	0248	-0028	34126	602	2744	14509
120	0298	-0033	34212	619	2751	14516
120	0397	-0044	34309	654	2759	14529
120	0495	-0038	34369	653	2764	14549
120	0565	-0036	34386	629	2765	14561

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0081	31710	880	2551	14410	0000	00000	2484
0010	-0137	33037	820	2660	14404	0020	00001	1449
0020	-0141	33355	784	2685	14408	0033	00003	1203
0030	-0145	33522	745	2699	14410	0045	00006	1074
0050	-0146	33672	725	2711	14415	0065	00014	0957
0075	-0135	33747	693	2717	14425	0089	00029	0901
0100	-0137	33788	696	2720	14429	0111	00049	0868
0125	-0125	33826	685	2723	14439	0132	00074	0841
0150	-0101	33871	665	2726	14455	0153	00103	0814
0175	-0062 E	33937	635	2730	14478	0173	00137	0778
0200	-0029	34009	608	2734	14499	0192	00173	0739
0225	-0024 C	34073	601	2739	14506	0210	00213	0692
0250	-0028	34130	602	2744	14509	0227	00254	0645
0300	-0033	34215	620	2751	14516	0258	00341	0578
0400	-0044	34311	655	2759	14529	0312	00534	0496
0500	-0040 B	34370	652	2764	14548	0360	00754	0452

C-REF-NO 020	YR 1964	DEPTH 649	WAVES 1 00X0	AIR T -01.0	VIS 8
CONS. NO 032	MONTH 9	MXSAMPD 06	WAVES 2 XX	WET B -01.2	STN
LAT 76-140N	DAY 11	NO.DPTH 14	WND-DIR CALM	WW-CODE 02	
LON 70-300W	HR 21.9	W-COLOR	WND-SPD 00	CLD-TPE 4	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1004.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
219	0000	-0154	31759	921	2557	14376
219	0010	-0152	32014	935	2577	14382
219	0020	-0143	32454	890	2613	14394
219	0030	-0140	33014	825	2658	14405
219	0050	-0140	33342	792	2684	14413
219	0075	-0150	33583	752	2704	14416
219	0100	-0144	33691	730	2713	14424
219	0150	-0122	33786	694	2720	14444
219	0200	-0102	33862	668	2725	14463
219	0298	0012	34055	583	2736	14535
219	0400	-0005	34280	609	2755	14547
219	0500	-0006	34376	614	2763	14564
219	0600	-0032	34410	630	2767	14569
219	0633	-0033	34410	634	2767	14575

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0154	31759	921	2557	14376	0000	00000	2429
0010	-0152	32014	935	2577	14382	0023	00001	2232
0020	-0143	32454	890	2613	14394	0044	00004	1895
0030	-0140	33014	825	2658	14405	0061	00008	1465
0050	-0140	33342	792	2684	14413	0088	00019	1212
0075	-0150	33583	752	2704	14416	0116	00037	1023
0100	-0144	33691	730	2713	14424	0141	00059	0940
0125	-0134	3375 B	711	2717	14434	0164	00086	0897
0150	-0122	33786	694	2720	14444	0186	00117	0871
0175	-0113	33824	681	2723	14453	0208	00153	0844
0200	-0102	33862	668	2725	14463	0229	00194	0818
0225	-0072 G	33907	643 B	2728	14482	0249	00238	0795
0250	-0042 I	33955	621 B	2730	14500	0269	00286	0771
0300	0012	34060	583	2736	14535	0307	00392	0720
0400	-0005	34280	609	2755	14547	0370	00617	0542
0500	-0006	34376	614	2763	14564	0421	00851	0468
0600	-0032	34410	630	2767	14570	0466	01105	0425

C-REF-NO 020	YR 1964	DEPTH 576	WAVES 1 00X0	AIR T -01.0	VIS B
CONS. NO 033	MONTH 9	MXSAMPD 06	WAVES 2 XX	WET B -01.2	STN
LAT 76-095N	DAY 12	NO.DPTH 14	WND-DIR CALM	WW-CODE 02	
LON 71-240W	HR 02.0	W-COLOR	WND-SPD 00	CLD-TPE 4	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1004.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
020	0000	-0099	30910		2487	14390
020	0010	-0071	31657		2546	14415
020	0020	-0075	32572		2620	14428
020	0030	-0082	33039		2658	14433
020	0050	-0124	33362		2686	14421
020	0075	-0129	33596		2705	14426
020	0100	-0118	33715		2714	14437
020	0150		33866			
020	0200	-0074	34000		2735	14478
020	0247	-0060	34118		2744	14494
020	0298	-0034	34228		2752	14516
020	0393	-0033	34345		2761	14534
020	0499	-0036	34388		2765	14551
020	0555	-0035	34401		2766	14560

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0099	30910		2487	14390	0000	00000	3094
0010	-0071	31657		2546	14415	0028	00001	2527
0020	-0075	32572		2620	14428	0050	00004	1824
0030	-0082	33039		2658	14433	0067	00009	1463
0050	-0124	33362		2686	14421	0094	00019	1201
0075	-0129	33596		2705	14426	0122	00037	1019
0100	-0118	33715		2714	14437	0146	00059	0930
0125	-0106	3380 B		2720	14448	0169	00085	0868
0150	-0095	33866		2725	14458	0190	00115	0820
0175	-0084	33935		2730	14468	0210	00148	0771
0200	-0074	34000		2735	14478	0229	00185	0724
0225	-0067	34064		2740	14486	0247	00223	0678
0250	-0058	34125		2745	14495	0263	00264	0634
0300	-0034	34231		2752	14516	0293	00349	0565
0400	-0033	34350		2762	14535	0346	00535	0473
0500	-0035	3440 B		2766	14551	0392	00746	0436

C-REF-NO 020	YR 1964	DEPTH 485	WAVES 1 00X0	AIR T -01.7	VIS 8
CONS. NO 034	MONTH 9	MXSAMPD 05	WAVES 2 0534	WET B -01.9	STN
LAT 76-078N	DAY 12	NO.DPTH 13	WND-DIR 080	WW-CODE 01	
LON 72-215W	HR 05.9	W-COLOR	WND-SPD 04	CLD-TPE 2	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 997.2	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
059	0000	-0130	31053	855	2499	14377
059	0010	-0127	31253	863	2515	14383
059	0020	-0090	32483	886	2613	14420
059	0030	-0127	33011	779	2657	14411
059	0050	-0137 B	33326	809	2683	14414
059	0075	-0128 B	33591	711	2704	14426
059	0100	-0123	33707	685	2713	14434
059	0150	-0104	33874	661	2726	14454
059	0196	-0063	34057	635	2740	14483
059	0247	-0033	34193	605	2749	14507
059	0294	-0049	34275	651	2757	14509
059	0400	-0040	34358	660	2763	14532
059	0475	-0037	34383	655	2765	14546

#WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0130	31053	855	2499	14377	0000	00000	2977
0010	-0127	31253	863	2515	14383	0029	00001	2823
0020	-0090	32483	886	2613	14420	0053	00005	1887
0030	-0127	33011	779	2657	14411	0070	00009	1471
0050	-0137 B	33326	809	2683	14414	0097	00020	1225
0075	-0128 B	33591	711	2704	14426	0125	00038	1023
0100	-0123	33707	685	2713	14434	0150	00060	0934
0125	-0116	3379 B	671	2720	14443	0173	00086	0869
0150	-0104	33874	661	2726	14454	0194	00116	0811
0175	-0082 B	33975	647	2734	14470	0213	00148	0741
0200	-0059	34070	631	2740	14486	0231	00183	0678
0225	-0042 B	34142	613	2745	14499	0248	00219	0630
0250	-0034	34199	607	2750	14508	0263	00256	0590
0300	-0049	34282	654	2757	14510	0291	00335	0518
0400	-0040	34358	660	2763	14532	0341	00511	0463

C-REF-NO 020	YR 1964	DEPTH 369	WAVES 1 0422	AIR T -01.7	VIS 8
CONS. NO 035	MONTH 9	MXSAMPD 03	WAVES 2 0422	WET B -01.9	STN
LAT 76-020N	DAY 12	NO.DPTH 12	WND-DIR 040	WW-CODE 01	
LON 74-230W	HR 11.0	W-COLOR	WND-SPD 08	CLD-TPE 3	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1003.7	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
110	0000	-0074	31275	844	2515	14407
110	0010		31751	833		
110	0020	-0107	32957	831	2652	14418
110	0030	-0132	33378	777	2687	14414
110	0050	-0145	33611	745	2706	14414
110	0075	-0149	33701	720	2714	14418
110	0100	-0151	33759	700	2718	14422
110	0150	-0093	33888	655	2727	14459
110	0200	-0058	34016	625	2736	14486
110	0250	-0035	34137	609	2745	14506
110	0300	-0031	34233	610	2752	14518
110	0350	-0038	34312	599	2759	14524

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0074	31275	844	2515	14407	0000	00000	2820
0010	-0095 B	31751	833	2554	14405	0026	00001	2448
0020	-0107	32957	831	2652	14418	0046	00004	1519
0030	-0132	33378	777	2687	14414	0060	00008	1188
0050	-0145	33611	745	2706	14414	0082	00016	1004
0075	-0149	33701	720	2714	14418	0107	00032	0932
0100	-0151	33759	700	2718	14422	0129	00052	0886
0125	-0126 D	33822	677	2723	14439	0151	00078	0844
0150	-0093	33888	655	2727	14459	0172	00107	0804
0175	-0073	33953	638	2732	14473	0192	00140	0762
0200	-0058	34016	625	2736	14486	0210	00176	0719
0225	-0045	34079	615	2740	14497	0228	00214	0677
0250	-0035	34137	609	2745	14506	0245	00254	0637
0300	-0031	34233	610	2752	14518	0275	00340	0565

C-REF-NO 020	YR 1964	DEPTH 402	WAVES 1 00X0	AIR T -02.3	VIS 8
CONS. NO 036	MONTH 9	MXSAMPD 04	WAVES 2 00X0	WET B -03.0	STN
LAT 75-450N	DAY 13	NO.DPTH 12	WND-DIR 030	WW-CODE 03	
LON 68-280W	HR 01.5	W-COLOR	WND-SPD 03	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1004.7	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
015	0000	-0062	30718	906	2470	14405
015	0010	-0149	31164	870	2508	14372
015	0020	-0130	32654	885	2628	14403
015	0030	-0146	33376	778	2687	14407
015	0050	-0154	33598	764	2705	14410
015	0075	-0155	33662	745	2711	14415
015	0100	-0134	33733	728	2716	14430
015	0150	-0124	33806	696	2721	14444
015	0200	-0058	33925	636	2729	14484
015	0250	0037	34090	684	2737	14538
015	0300	0093	34242	547	2746	14574
015	0380	0127	34390	525	2756	14605

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0062	30718	906	2470	14405	0000	00000	3252
0010	-0149	31164	870	2508	14372	0031	00001	2887
0020	-0130	32654	885	2628	14403	0054	00005	1745
0030	-0146	33376	778	2687	14407	0069	00008	1185
0050	-0154	33598	764	2705	14410	0091	00017	1012
0075	-0155	33662	745	2711	14415	0116	00033	0961
0100	-0134	33733	728	2716	14430	0139	00054	0911
0125	-0130 D	3377 B	714	2719	14436	0162	00080	0881
0150	-0124	33806	696	2721	14444	0184	00111	0855
0175	-0096	33860	661 B	2725	14461	0205	00146	0823
0200	-0058	33925	636	2729	14484	0225	00186	0789
0225	-0010 C	34005	665 D	2733	14512	0245	00228	0750
0250	0037	34090	684	2737	14538	0263	00273	0712
0300	0093	34242	547	2746	14574	0297	00368	0633

C-REF-NO 020	YR 1964	DEPTH 540	WAVES 1 00X0	AIR T -01.1	VIS 8
CONS. NO 037	MONTH 9	MXSAMPD 05	WAVES 2 1235	WET B -03.0	STN
LAT 75-370N	DAY 13	NO.DPTH 13	WND-DIR 020	WW-CODE 02	
LON 70-050W	HR 07.8	W-COLOR	WND-SPD 02	CLD-TPE 1	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1005.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
078	0000	0085	32232	622	2585	14493
078	0010	0134	32329	494	2590	14518
078	0020	-0096	33158	885	2668	14426
078	0030	-0141	33393	590	2689	14410
078	0050	-0160	33616	746	2707	14407
078	0075	-0152	33719	719	2715	14417
078	0100	-0150	33776	710	2720	14423
078	0150	-0081	33876	600	2726	14465
078	0200	0012	34031	596	2734	14518
078	0250	0068	34167	437	2742	14554
078	0300	0108	34289	537	2749	14582
078	0400	0134	34433	417	2759	14612
078	0515	-0012	34415	604	2766	14565

#WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0085	32232	622	2585	14493	0000	00000	2154
0010	0134	32329	494	2590	14518	0021	00001	2108
0020	-0096	33158	885	2668	14426	0039	00004	1368
0030	-0141	33393	590	2689	14410	0052	00007	1174
0050	-0160	33616	746	2707	14407	0074	00016	0996
0075	-0152	33719	719	2715	14417	0098	00031	0918
0100	-0150	33776	710	2720	14423	0120	00051	0873
0125	-0122 C	33824	656 C	2723	14440	0142	00076	0844
0150	-0081	33876	600	2726	14465	0163	00106	0818
0175	-0034 C	33951	601 D	2730	14492	0183	00139	0781
0200	0012	34031	596	2734	14518	0202	00176	0743
0225	0043	34101	510 F	2738	14537	0221	00216	0707
0250	0068	34167	437	2742	14554	0238	00258	0672
0300	0108	34289	537	2749	14582	0270	00349	0607
0400	0134	34433	417	2759	14612	0327	00552	0520
0500	0014 B	34428	594 E	2766	14574	0376	00775	0441

C-REF-NO 020	YR 1964	DEPTH 612	WAVES 1 3422	AIR T 01.0	VIS 8
CONS. NO 038	MONTH 9	MXSAMPD 06	WAVES 2 3422	WET B 00.5	STN
LAT 75-280N	DAY 13	NO.DPTH 14	WND-DIR 340	WW-CODE 02	
LON 71-520W	HR 12.3	W-COLOR	WND-SPD 04	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1006.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
123	0000	0209	32346	779	2586	14550
123	0010	0210	32344	779	2586	14552
123	0020	-0118	33363	831	2685	14419
123	0030	-0154	33537	752	2701	14406
123	0050	-0160	33666	750	2711	14408
123	0075	-0135	33732	723	2716	14425
123	0100	-0149	33779	713	2720	14423
123	0150	-0155	33842	696	2725	14430
123	0200	-0072	33940	629	2730	14478
123	0300	0100	34280	549	2749	14578
123	0400	0137	34438	521	2759	14613
123	0500	0101	34482	520	2765	14614
123	0550	0135	34468	520	2762	14637
123	0590	0123	34484	521	2764	14639

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0209	32346	779	2586	14550	0000	00000	2144
0010	0210	32344	779	2586	14552	0022	00001	2147
0020	-0118	33363	831	2685	14419	0038	00003	1204
0030	-0154	33537	752	2701	14406	0050	00006	1060
0050	-0160	33666	750	2711	14408	0070	00015	0958
0075	-0135	33732	723	2716	14425	0094	00030	0913
0100	-0149	33779	713	2720	14423	0116	00050	0871
0125	-0159 C	33811	707	2723	14423	0138	00075	0842
0150	-0155	33842	696	2725	14430	0159	00104	0818
0175	-0119 D	33886	665	2728	14451	0179	00138	0795
0200	-0072	33940	629	2730	14478	0199	00176	0771
0225	-0023 E	3403 D	603	2735	14506	0218	00217	0729
0250	0022 F	3411 E	581	2740	14532	0236	00261	0688
0300	0100	34280	549	2749	14578	0268	00353	0609
0400	0137	34438	521	2759	14613	0325	00555	0519
0500	0101	34482	520	2765	14614	0375	00783	0460

C-REF-NO 020	YR 1964	DEPTH 567	WAVES 1 3422	AIR T 00.0	VIS 9
CONS. NO 039	MONTH 9	MXSAMPD 05	WAVES 2 XX	WET B -00.5	STN
LAT 75-235N	DAY 13	NO.DPTH 13	WND-DIR 340	WW-CODE 01	
LON 73-340W	HR 17.7	W-COLOR	WND-SPD 05	CLD-TPE 5	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1007.1	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
177	0000	-0083	32059	816	2579	14414
177	0010	-0071	32095	815	2581	14421
177	0020	-0118	33176	810	2670	14416
177	0030	-0140	33319	762	2682	14409
177	0050	-0147	33590	757	2705	14413
177	0075	-0153	33702	720	2714	14416
177	0100	-0152	33766	705	2719	14422
177	0149	-0134	33854	679	2726	14439
177	0200	-0015 B	34020	603	2734	14505
177	0250	0094	34234	553	2746	14566
177	0298	0127	34327	542	2751	14590
177	0500	0090	34468	514	2765	14609
177	0543	0074	34467	508	2766	14609

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0083	32059	816	2579	14414	0000	00000	2216
0010	-0071	32095	815	2581	14421	0022	00001	2191
0020	-0118	33176	810	2670	14416	0040	00004	1347
0030	-0140	33319	762	2682	14409	0053	00007	1231
0050	-0147	33590	757	2705	14413	0076	00016	1020
0075	-0153	33702	720	2714	14416	0100	00032	0930
0100	-0152	33766	705	2719	14422	0123	00052	0880
0125	-0150 C	3381 B	694	2723	14427	0145	00077	0846
0150	-0132	33857	678	2726	14441	0166	00107	0814
0175	-0079 E	33931	642	2730	14470	0186	00140	0776
0200	-0015 B	34020	603	2734	14505	0205	00177	0737
0225	0045 C	3413 B	574	2740	14538	0223	00216	0685
0250	0094	34234	553	2746	14566	0239	00257	0639
0300	0127	34330	542	2751	14591	0270	00344	0590
0400	0130 I	3444 C	526 B	2760	14610	0326	00542	0513
0500	0090	34468	514	2765	14609	0375	00769	0463

C-REF-NO 020	YR 1964	DEPTH 417	WAVES 1 3422	AIR T 00.6	VIS 9
CONS. NO 040	MONTH 9	MXSAMPD 04	WAVES 2 3422	WET B -00.5	STN
LAT 75-130N	DAY 13	NO.DPTH 12	WND-DIR 340	WW-CODE 01	
LON 75-180W	HR 22.5	W-COLOR	WND-SPD 07	CLD-TPE 3	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1006.4	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
225	0000	0141	32359	798	2592	14520
225	0010	0139	32341	809	2591	14521
225	0020	-0138	33512	804	2698	14411
225	0030	-0148	33622	763	2707	14410
225	0050	-0149	33715	713	2715	14414
225	0075	-0155 B	33767	705	2719	14416
225	0100	-0142	33807	699	2722	14427
225	0150	-0070 B	33934	635	2730	14471
225	0200	-0008	34064	595	2738	14509
225	0250	-0026	34183	610	2748	14511
225	0300	-0020	34263	618	2754	14523
225	0400	-0033		618		

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0141	32359	798	2592	14520	0000	00000	2090
0010	0139	32341	809	2591	14521	0021	00001	2102
0020	-0138	33512	804	2698	14411	0037	00003	1084
0030	-0148	33622	763	2707	14410	0048	00006	0996
0050	-0149	33715	713	2715	14414	0067	00014	0923
0075	-0155 B	33767	705	2719	14416	0090	00028	0880
0100	-0142	33807	699	2722	14427	0112	00048	0852
0125	-0109 C	33866	670 B	2726	14447	0133	00072	0816
0150	-0070 B	33934	635	2730	14471	0153	00100	0778
0175	-0033 C	34000	610	2734	14493	0172	00132	0744
0200	-0008	34064	595	2738	14509	0190	00168	0707
0225	-0014 D	34127	600	2743	14512	0207	00205	0656
0250	-0026	34183	610	2748	14511	0223	00244	0606
0300	-0020	34263	618	2754	14523	0252	00326	0548
0400	-0033		618					

C-REF-NO 020	YR 1964	DEPTH 375	WAVES 1 3422	AIR T -00.8	VIS 9
CONS. NO 041	MONTH 9	MXSAMPD 03	WAVES 2 3444	WET B -01.4	STN
LAT 75-050N	DAY 14	NO.DPTH 12	WND-DIR 340	WW-CODE 02	
LON 77-020W	HR 02.8	W-COLOR	WND-SPD 07	CLD-TPE 3	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1008.8	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
028	0000	0002	32304	834	2595	14456
028	0010	0001	32292	825	2594	14457
028	0020	0002	32294	836	2595	14460
028	0030	-0102	32939	797	2651	14422
028	0050	-0134	33247	751	2677	14415
028	0075	-0128	33394	731	2688	14424
028	0100	-0136	33596	740	2705	14427
028	0150	-0134	33797	624	2721	14439
028	0200	-0088	33933	580	2730	14470
028	0250	-0014	34103	564	2741	14515
028	0300	0010	34219	565	2749	14536
028	0350	0002	34266	559	2753	14542

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0002	32304	834	2595	14456	0000	00000	2059
0010	0001	32292	825	2594	14457	0021	00001	2068
0020	0002	32294	836	2595	14460	0042	00004	2066
0030	-0102	32939	797	2651	14422	0060	00009	1533
0050	-0134	33247	751	2677	14415	0088	00020	1286
0075	-0128	33394	731	2688	14424	0119	00040	1174
0100	-0136	33596	740	2705	14427	0147	00064	1015
0125	-0139	3372 C	689 D	2715	14431	0171	00092	0920
0150	-0134	33797	624	2721	14439	0193	00124	0859
0175	-0116	3387 B	596	2726	14453	0215	00159	0811
0200	-0088	33933	580	2730	14470	0234	00197	0770
0225	-0050 C	34019	569	2736	14494	0253	00238	0720
0250	-0014	34103	564	2741	14515	0271	00281	0673
0300	0010	34219	565	2749	14536	0303	00371	0598

C-REF-NO 020	YR 1964	DEPTH 485	WAVES 1 3421	AIR T -01.2	VIS 9
CONS. NO 042	MONTH 9	MXSAMPD 05	WAVES 2 XX	WET B -01.6	STN
LAT 74-550N	DAY 14	NO.DPTH 13	WND-DIR 340	WW-CODE 02	
LON 78-480W	HR 07.2	W-COLOR	WND-SPD 02	CLD-TPE 0	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1009.8	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
072	0000	-0054	32187	880	2588	14429
072	0010	-0043	32210	830	2590	14436
072	0020	-0023	32275	823	2594	14448
072	0030	-0034	32476	807	2611	14447
072	0050	-0108	32957	758	2652	14423
072	0075	-0102	33186	695	2671	14433
072	0100	-0122	33368	716	2686	14430
072	0150	-0126	33670	690	2711	14441
072	0200	-0150	33806	697	2722	14440
072	0250	-0101	32625	758	2625	14454
072	0299	-0005	34062	583	2737	14527
072	0400	-0009	34252	607	2753	14545
072	0470	-0019	34320	593	2759	14553

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0054	32187	880	2588	14429	0000	00000	2127
0010	-0043	32210	830	2590	14436	0021	00001	2113
0020	-0023	32275	823	2594	14448	0042	00004	2070
0030	-0034	32476	807	2611	14447	0062	00009	1912
0050	-0108	32957	758	2652	14423	0097	00023	1516
0075	-0102	33186	695	2671	14433	0133	00046	1341
0100	-0122	33368	716	2686	14430	0165	00074	1194
0125	-0126 C	33535	707 B	2700	14435	0193	00107	1064
0150	-0126	33670	690	2711	14441	0219	00143	0959
0175	-0141 D	3383 I	688	2724	14440	0241	00180	0829
0200	-0150	33806	697	2722	14440	0262	00221	0844
0225	-0133	3313 I	739 D	2667	14442	0290	00283	1364
0250	-0101	32625	758	2625	14454	0330	00379	1760
0300	-0004	3407 B	582	2738	14528	0392	00548	0700
0400	-0009	34252	607	2753	14545	0455	00773	0561

C-REF-NO 020	YR 1964	DEPTH 1040	WAVES 1 3120	AIR T -01.9	VIS 8
CONS. NO 043	MONTH 9	MXSAMPD 10	WAVES 2 0332	WET B -02.2	STN
LAT 73-225N	DAY 18	NO.DPTH 18	WND-DIR 310	WW-CODE 03	
LON 76-125W	HR 15.7	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1016.3	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
166	0000	0061	31616	830	2537	14474
166	0010	0027	31973	848	2568	14465
166	0020	-0006	32203	808	2588	14455
166	0030	0034	32483	785	2608	14478
166	0050	-0113	32812	702	2641	14418
166	0074	-0124	32976	680	2654	14419
166	0099	-0116	33196	700	2672	14430
166	0148	-0132	33556	697	2701	14436
166	0198	-0149	33796	695	2721	14440
157	0234	-0144		682		
157	0279	-0076	33945	622	2731	14489
157	0369	0017		567		
157	0467	0045	34289	561	2753	14581
157	0563	0052		562		
157	0664	0052		574		
157	0763	0037	34440	551	2766	14629
157	0961	0016		541		
157	0996	0016		540		

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0061	31616	830	2537	14474	0000	00000	2612
0010	0027	31973	848	2568	14465	0025	00001	2323
0020	-0006	32203	808	2588	14455	0047	00005	2132
0030	0034	32483	785	2608	14478	0068	00010	1936
0050	-0113	32812	702	2641	14418	0104	00024	1626
0075	-0124	32985	681	2655	14420	0143	00049	1489
0100	-0116	33204	700	2673	14431	0178	00081	1321
0125	-0122 B	33401	702	2689	14435	0210	00117	1168
0150	-0133	33568	697	2702	14436	0237	00156	1035
0175	-0143	33701	697	2713	14437	0262	00197	0928
0200	-0149	33801	695	2722	14440	0284	00240	0848
0225	-0148	3386 D	687	2727	14446	0305	00285	0800
0250	-0123 C	3391 D	662	2730	14462	0325	00333	0772
0300	-0049	33988	603	2733	14506	0363	00441	0742
0400	0031 B	3418 C	562	2745	14562	0433	00690	0641
0500	0049	3429 H	560	2753	14588	0494	00970	0567
0600	0053	3438 G	568	2760	14608	0548	01275	0505
0700	0047	3443 C	567	2764	14623	0597	01601	0463

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0039 C		561 C					
1000	0015		539					

C-REF-NO 020	YR 1964	DEPTH 896	WAVES 1 3322	AIR T 01.8	VIS 8
CONS. NO 044	MONTH 9	MXSAMPD 08	WAVES 2 3322	WET B -00.1	STN
LAT 73-470N	DAY 18	NO.DPTH 15	WND-DIR 330	WW-CODE 02	
LON 74-080W	HR 23.0	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1015.6	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
230	0000	0128	31946	804	2560	14509
230	0010	0109	32045	802	2569	14503
230	0020	0006	32489	771	2610	14464
230	0030	-0112	32679	700	2630	14414
230	0050	-0120	32940	696	2651	14417
230	0075	-0138	33264	675	2678	14417
230	0100	-0135	33452	696	2693	14425
230	0150	-0131	33204	674	2673	14432
230	0200	-0138	33605	698	2706	14442
230	0300	-0090	33947	623	2732	14486
230	0400	0033	33435	552	2685	14552
230	0500	0071	34410	548	2761	14600
230	0600	0060	34431	547	2763	14612
230	0800	0021	34452	538	2767	14628
230	0850	0014	34464	474	2769	14633

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0128	31946	804	2560	14509	0000	00000	2396
0010	0109	32045	802	2569	14503	0024	00001	2310
0020	0006	32489	771	2610	14464	0045	00004	1919
0030	-0112	32679	700	2630	14414	0063	00009	1730
0050	-0120	32940	696	2651	14417	0096	00022	1526
0075	-0138	33264	675	2678	14417	0131	00044	1270
0100	-0135	33452	696	2693	14425	0162	00071	1126
0125	-0132	3334 I	687 B	2684	14429	0191	00105	1211
0150	-0131	33204	674	2673	14432	0223	00151	1314
0175	-0135 B	3337 I	686	2687	14436	0254	00203	1181
0200	-0138	33605	698	2706	14442	0282	00256	1002
0225	-0133	3376 C	687 B	2718	14451	0305	00307	0884
0250	-0124	3387 C	671 B	2726	14461	0327	00359	0803
0300	-0090	33947	623	2732	14486	0366	00470	0754
0400	0033	33435	552	2685	14552	0465	00837	1204
0500	0071	34410	548	2761	14600	0551	01215	0493
0600	0060	34431	547	2763	14612	0599	01489	0470
0700	0041 B	3444 B	568 E	2765	14620	0646	01800	0449
0800	0021	34452	538	2767	14628	0690	02141	0426

C-REF-NO 020	YR 1964	DEPTH 1006	WAVES 1 2820	AIR T 00.6	VIS 8
CONS. NO 045	MONTH 9	MXSAMPD 10	WAVES 2 3221	WET B -00.2	STN
LAT 74-080N	DAY 19	NO.DPTH 15	WND-DIR 280	WW-CODE 02	
LON 72-080W	HR 04.7	W-COLOR	WND-SPD 01	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1015.2	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
047	0000	0133	31645	812	2536	14507
047	0005	0134	31606	815	2532	14508
047	0020	0066		820		
047	0030	0030	32548	795	2614	14478
047	0050	-0116	32885	712	2647	14418
047	0075	-0122	33104	674	2665	14422
047	0100	-0132	33296	693	2680	14424
047	0150	-0144	32382	698	2607	14414
047	0194	-0156	33836	696	2725	14436
047	0293	-0012	34111	574	2742	14523
047	0390	0045	34294	554	2753	14568
047	0490	0068	33893	543	2720	14590
047	0590	0072	34444	547	2764	14616
047	0789	0053	34474	513	2767	14641
047	0976	0013		461		

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0133	31645	812	2536	14507	0000	00000	2628
0010	0116 E	3174 I	820	2544	14502	0026	00001	2545
0020	0066	3209 I	820	2575	14486	0050	00005	2251
0030	0030	32548	795	2614	14478	0071	00010	1885
0050	-0116	32885	712	2647	14418	0106	00024	1569
0075	-0122	33104	674	2665	14422	0143	00048	1398
0100	-0132	33296	693	2680	14424	0176	00077	1246
0125	-0139	3278 I	699	2639	14418	0213	00120	1641
0150	-0144	32382	698	2607	14414	0258	00184	1939
0175	-0154 B	3313 I	699	2667	14424	0299	00253	1363
0200	-0149 C	3391 I	689	2731	14441	0326	00303	0762
0225	-0119 I	3415 I	661 C	2749	14463	0343	00340	0591
*0250	-0084 I	3425 I	631 D	2756	14485	0357	00375	0526
0300	-0006	3414 B	571	2743	14528	0387	00459	0653
0400	0049	3425 H	552	2749	14571	0450	00686	0601
0500	0069	3394 G	543	2723	14592	0524	01031	0850
0600	0072	3412 I	546	2738	14613	0602	01473	0711
0700	0065	3425 I	533	2748	14628	0669	01917	0611
0800	0053		515					

C-REF-NO 020	YR 1964	DEPTH 1006	WAVES 1 1421	AIR T 01.1	VIS 8
CONS. NO 046	MONTH 9	MXSAMPD 10	WAVES 2 XX	WET B 00.0	STN
LAT 75-000N	DAY 19	NO.DPTH 17	WND-DIR 140	WW-CODE 02	
LON 68-450W	HR 15.0	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1019.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
157	0000	0092	31683	811	2541	14489
157	0010	0090	32237	811	2586	14497
157	0020	-0130	33269	842	2678	14412
157	0030	-0144	33345	748	2685	14408
157	0050	-0160	33607	749	2706	14407
157	0075	-0167	33657	748	2711	14409
157	0100	-0154	33521	725	2699	14417
157	0150	-0135	33839	685	2724	14439
157	0200	-0043	33960	617	2731	14492
157	0250	0067	34166	563	2742	14553
157	0300	0135	34320	545	2750	14594
150	0386	0145	34423	539	2757	14614
150	0485	0133	34480	334	2763	14626
150	0584	0101	34496	425	2766	14628
150	0682	0074	34490	466	2767	14632
150	0782	0055	34493	497	2769	14641
150	0956	0029	34476	490	2769	14658

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0092	31683	811	2541	14489	0000	00000	2577
0010	0090	32237	811	2586	14497	0024	00001	2153
0020	-0130	33269	842	2678	14412	0041	00004	1272
0030	-0144	33345	748	2685	14408	0054	00007	1210
0050	-0160	33607	749	2706	14407	0076	00016	1003
0075	-0167	33657	748	2711	14409	0101	00031	0961
0100	-0154	33521	725	2699	14417	0126	00055	1067
0125	-0148 D	3364 I	706	2709	14426	0152	00084	0974
0150	-0135	33839	685	2724	14439	0175	00116	0826
0175	-0095 B	3391 D	652	2729	14463	0195	00150	0788
0200	-0043	33960	617	2731	14492	0215	00188	0769
0225	0014 C	3406 B	587	2736	14523	0233	00229	0721
0250	0067	34166	563	2742	14553	0251	00271	0673
0300	0135	34320	545	2750	14594	0283	00362	0603
0400	0145	34434	507 D	2758	14616	0340	00565	0527
0500	0129	34484	340 C	2763	14627	0391	00800	0480
0600	0096	34495	434	2766	14629	0438	01064	0448
0700	0070	34491	473	2768	14634	0483	01362	0434
0800	0050	34488	496	2769	14642	0526	01696	0422

C-REF-NO 020	YR 1964	DEPTH	338	WAVES 1 1321	AIR T -11.0	VIS	8
CONS. NO 047	MONTH 9	MXSAMPD	03	WAVES 2 1321	WET B -16.0	STN	
LAT 75-250N	DAY 19	NO. DPTH	12	WND-DIR 130	WW-CODE 02		
LON 67-380W	HR 19.9	W-COLOR		WND-SPD 07	CLD-TPE 6		
MARSD SQ 259	C/I 1810	W-TRNSP		BARO 1020.7	CLD-AMT 8	HW	

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
199	0000	-0068	32016	842	2575	14420
199	0010	-0060	32394	853	2605	14431
199	0020	-0126	33359	814	2685	14415
199	0030	-0144	33513	783	2698	14410
199	0050	-0155	33630	755	2708	14410
199	0075	-0143	33721	735	2715	14421
199	0100	-0121	33786	702	2720	14436
199	0150	-0084	33853	665	2724	14463
199	0200	-0025	33958	614	2730	14500
199	0250	0047	34109	575	2738	14543
199	0300	0086	34251	528	2747	14571
199	0330	0088	34257	526	2748	14577

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0068	32016	842	2575	14420	0000	00000	2254
0010	-0060	32394	853	2605	14431	0021	00001	1966
0020	-0126	33359	814	2685	14415	0037	00003	1205
0030	-0144	33513	783	2698	14410	0049	00006	1081
0050	-0155	33630	755	2708	14410	0070	00015	0987
0075	-0143	33721	735	2715	14421	0094	00030	0919
0100	-0121	33786	702	2720	14436	0116	00050	0874
0125	-0103 B	3382 B	682	2722	14449	0138	00075	0851
0150	-0084	33853	665	2724	14463	0159	00105	0834
0175	-0057	33900	640	2727	14480	0180	00140	0809
0200	-0025	33958	614	2730	14500	0200	00178	0779
0225	0012 B	34031	594	2734	14522	0219	00220	0742
0250	0047	34109	575	2738	14543	0237	00265	0703
0300	0086	34251	528	2747	14571	0271	00359	0621

C-REF-NO 020	YR 1964	DEPTH 600	WAVES 1 00X0	AIR T -00.4	VIS 8
CONS. NO 048	MONTH 9	MXSAMPD 06	WAVES 2 XX	WET B -02.1	STN
LAT 75-480N	DAY 20	NO.DPTH 14	WND-DIR 090	WW-CODE 02	
LON 66-330W	HR 02.1	W-COLOR	WND-SPD 03	CLO-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1022.4	CLO-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
021	0000	-0160	30010	899	2415	14349
021	0010	-0149	31138	959	2506	14371
021	0020	-0111 B	32167	928	2588	14405
021	0030	-0134	33091	798	2664	14409
021	0050	-0144	33303	750	2681	14411
021	0075	-0146	33464	720	2694	14416
021	0100	-0143	33576	718	2703	14423
021	0150	-0132	33745	698	2717	14439
021	0200	-0094	33856	654	2724	14467
021	0250	-0031	33964	610	2731	14506
021	0300	0024	34055	581	2735	14540
021	0400	0094	34284	507	2750	14592
021	0500	0110	34415	472	2759	14617
021	0570	0109	34444	462	2761	14629

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0160	30010	899	2415	14349	0000	00000	3776
0010	-0149	31138	959	2506	14371	0034	00001	2907
0020	-0111 B	32167	928	2588	14405	0059	00005	2124
0030	-0134	33091	798	2664	14409	0077	00010	1407
0050	-0144	33303	750	2681	14411	0103	00020	1241
0075	-0146	33464	720	2694	14416	0133	00039	1115
0100	-0143	33576	718	2703	14423	0160	00063	1028
0125	-0140	33669	711	2711	14430	0185	00092	0957
0150	-0132	33745	698	2717	14439	0208	00125	0899
0175	-0116	33804	678	2721	14451	0231	00162	0858
0200	-0094	33856	654	2724	14467	0252	00203	0826
0225	-0064 B	33911	631	2728	14486	0272	00247	0796
0250	-0031	33964	610	2731	14506	0292	00295	0770
0300	0024	34055	581	2735	14540	0330	00402	0730
0400	0094	34284	507	2750	14592	0397	00641	0603
0500	0110	34415	472	2759	14617	0454	00901	0518

C-REF-NO 020	YR 1964	DEPTH	269	WAVES 1 1020	AIR T 00.0	VIS 7
CONS. NO 049	MONTH 9	MXSAMPD	03	WAVES 2 1052	WET B -00.5	STN
LAT 75-530N	DAY 25	NO.DPTH	11	WND-DIR 100	WW-CODE 70	
LON 76-430W	HR 01.7	W-COLOR		WND-SPD 04	CLD-TPE 7	
MARSD SQ 260	C/I 1810	W-TRNSP		BARO 1012.2	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
017	0000	-0044	32147	845	2585	14433
017	0010	-0043	32163	846	2586	14435
017	0020	-0087	32751	860	2635	14425
017	0030	-0118	33204	769	2673	14418
017	0050	-0130	33514	721	2698	14420
017	0075	-0143	33686	721	2712	14421
017	0100	-0130	33787	684	2720	14432
017	0150	-0104	33894	644	2728	14454
017	0200	-0058	34016	601	2736	14486
017	0250	-0050	34094	572	2742	14499
017	0260	-0049	34094	577	2742	14501

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0044	32147	845	2585	14433	0000	00000	2161
0010	-0043	32163	846	2586	14435	0022	00001	2149
0020	-0087	32751	860	2635	14425	0041	00004	1683
0030	-0118	33204	769	2673	14418	0056	00008	1325
0050	-0130	33514	721	2698	14420	0080	00017	1083
0075	-0143	33686	721	2712	14421	0106	00034	0946
0100	-0130	33787	684	2720	14432	0129	00054	0871
0125	-0118	3385 B	661	2725	14443	0150	00079	0827
0150	-0104	33894	644	2728	14454	0171	00108	0795
0175	-0080 C	33957	622	2732	14470	0190	00140	0756
0200	-0058	34016	601	2736	14486	0209	00176	0719
0225	-0051 B	3407 B	580 B	2740	14494	0227	00214	0684
0250	-0050	34094	572	2742	14499	0243	00256	0662

C-REF-NO 020	YR 1964	DEPTH	626	WAVES 1 0422	AIR T 01.2	VIS B
CONS. NO 050	MONTH 9	MXSAMPD	06	WAVES 2 0422	WET B 00.9	STN
LAT 74-320N	DAY 25	NO.DPTH	15	WND-DIR 040	WW-CODE 01	
LON 77-560W	HR 12.8	W-COLOR		WND-SPD 06	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP		BARO 1008.5	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
128	0000	0093	32518	805	2608	14501
128	0010	0092	32503	807	2607	14502
128	0020	-0114	33391	810	2688	14421
128	0030	-0135	33531	775	2700	14415
128	0049	-0147	33663	726	2711	14414
128	0074	-0151	33768	698	2719	14418
128	0098	-0150	33807	690	2722	14423
128	0150	-0119	33880	658	2727	14447
128	0199	-0016	34029	594	2735	14505
128	0246	0035	34167	566	2744	14538
128	0294	0096	34308	540	2751	14575
128	0394	0109	34422	547	2760	14599
128	0485	0078	33836	535	2715	14592
128	0583	0010	34421	584	2765	14586
128	0620	0008	32842	588	2638	14569

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0093	32518	805	2608	14501	0000	00000	1941
0010	0092	32503	807	2607	14502	0020	00001	1952
0020	-0114	33391	810	2688	14421	0035	00003	1184
0030	-0135	33531	775	2700	14415	0047	00006	1069
0050	-0147	33669	724	2711	14414	0067	00014	0959
0075	-0151	33770	698	2719	14418	0090	00029	0879
0100	-0150	33809	689	2722	14423	0112	00049	0848
0125	-0141 B	3384 B	677	2725	14432	0133	00073	0825
0150	-0119	33880	658	2727	14447	0154	00102	0801
0175	-0068 E	33951	625	2731	14476	0173	00135	0765
0200	-0015	34032	593	2735	14506	0192	00171	0728
0225	0015 B	34106	576	2740	14524	0210	00210	0687
0250	0041	34180	563	2744	14541	0227	00251	0646
0300	0100	3433 B	540	2753	14578	0258	00337	0571
0400	0108	3438 F	546	2756	14599	0314	00539	0543
0500	0066 C	3411 I	542	2737	14593	0377	00838	0716
0600	0014 D	3338 I	580	2681	14576	0476	01407	1231

C-REF-NO 020	YR 1964	DEPTH 810	WAVES 1 3523	AIR T 05.0	VIS 8
CONS. NO 051	MONTH 9	MXSAMPD 08	WAVES 2 3523	WET B 04.5	STN
LAT 72-480N	DAY 25	NO.DPTH 15	WND-DIR 350	WW-CODE 74	
LON 74-000W	HR 22.4	W-COLOR	WND-SPD 11	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 997.6	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
231	0000	0158	31530	796	2525	14516
231	0010	0158	31525	796	2524	14518
231	0020	0159	31543	800	2526	14520
231	0030	0148	32319	871	2589	14528
231	0050	-0078	32709	732	2631	14433
231	0075	-0099	33015	713	2657	14432
231	0100	-0131	33302	696	2681	14425
231	0150	-0137	33585	681	2704	14434
224	0186	-0143	33770	679	2719	14440
224	0276	-0037	34027	586	2736	14508
224	0366	0033	34270	546	2752	14558
224	0466	0059	34370	555	2759	14588
224	0570	0059	34418	557	2762	14606
224	0676	0042	34437	551	2765	14616
224	0791	0028	34444	535	2766	14629

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0158	31530	796	2525	14516	0000	00000	2731
0010	0158	31525	796	2524	14518	0027	00001	2735
0020	0159	31543	800	2526	14520	0055	00006	2721
0030	0148	32319	871	2589	14528	0079	00012	2125
0050	-0078	32709	732	2631	14433	0118	00027	1716
0075	-0099	33015	713	2657	14432	0158	00053	1473
0100	-0131	33302	696	2681	14425	0192	00083	1242
0125	-0139 C	3347 E	686	2695	14428	0222	00117	1110
0150	-0137	33585	681	2704	14434	0249	00155	1020
0175	-0143	33717	680	2715	14438	0273	00195	0916
0200	-0131 E	3382 B	667 B	2723	14449	0295	00238	0840
0225	-0105 I	3390 D	643 C	2728	14466	0316	00282	0786
*0250	-0075 G	3397 C	617 B	2733	14485	0335	00329	0746
0300	-0014	3410 B	571	2741	14523	0371	00430	0675
0400	0046	3432 B	546	2755	14571	0433	00649	0546
0500	0061	34390	556	2760	14595	0485	00892	0501
0600	0055	34426	556	2763	14609	0535	01169	0470
0700	0043 B	34443	548	2765	14621	0581	01479	0449
0800	0026	34443	533	2766	14630	0626	01824	0437

C-REF-NO 020	YR 1964	DEPTH 1006	WAVES 1 3436	AIR T -00.7	VIS 8
CONS. NO 052	MONTH 9	MXSAMPD 10	WAVES 2 3320	WET B -02.1	STN
LAT 71-310N	DAY 27	NO.DPTH 18	WND-DIR 330	WW-CODE 70	
LON 69-300W	HR 22.8	W-COLOR	WND-SPD 02	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 998.3	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
236	0000	0130	31646	800	2536	14506
236	0005	0128	31651	799	2536	14506
236	0020	0080	31894	806	2559	14490
236	0030	0002	32290	803	2594	14461
236	0050	-0061	32476	767	2612	14438
236	0075	-0111	32662	735	2629	14421
236	0100	-0131	32846	695	2644	14419
236	0150	-0150	33206	698	2674	14423
236	0200	-0152	33527	700	2700	14435
228	0250	-0148	33748	680	2717	14448
228	0290	-0100	33916	624	2730	14480
228	0391	-0001	34176	558	2746	14546
228	0489	0045	34320	550	2755	14585
228	0587	0060	34397	551	2761	14609
228	0689	0055	34419	549	2763	14624
228	0789	0040	34452	547	2766	14634
228	0890	0032	34457	533	2767	14648
228	0991	0032	33545	536	2694	14652

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0130	31646	800	2536	14506	0000	00000	2626
0010	0120	31690	801	2540	14503	0026	00001	2587
0020	0080	31894	806	2559	14490	0051	00005	2409
0030	0002	32290	803	2594	14461	0074	00011	2069
0050	-0061	32476	767	2612	14438	0114	00027	1901
0075	-0111	32662	735	2629	14421	0160	00056	1740
0100	-0131	32846	695	2644	14419	0202	00094	1591
0125	-0143	33029	690 B	2659	14419	0240	00138	1446
0150	-0150	33206	698	2674	14423	0275	00186	1306
0175	-0152	33375	700	2687	14428	0306	00238	1174
0200	-0152	33527	700	2700	14435	0334	00292	1057
0225	-0154 B	33645	695	2709	14439	0359	00348	0965
0250	-0148	33748	680	2717	14448	0383	00404	0886
0300	-0088	33950	614	2732	14487	0424	00520	0753
0400	0005	34193	556	2747	14550	0493	00765	0614
0500	0048	34332	550	2756	14588	0551	01031	0536
0600	0060	34401	551	2761	14611	0603	01324	0493
0700	0053	34423	549	2763	14625	0652	01650	0472

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0039	3448 E	545	2768	14636	0697	01997	0422
1000	0032	3345 E	536	2686	14652	0859	03579	1181

C-REF-NO 020	YR 1964	DEPTH 1554	WAVES 1 3121	AIR T -05.6	VIS 8
CONS. NO 053	MONTH 9	MXSAMPD 15	WAVES 2 3133	WET B -05.6	STN
LAT 74-260N	DAY 29	NO.DPTH 20	WND-DIR 310	WW-CODE 03	
LON 70-090W	HR 17.0	W-COLOR	WND-SPD 09	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 994.6	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
177	0000	0043	32363	805	2598	14476
177	0010	0043	32356	808	2598	14478
177	0020	0040	32416	805	2603	14479
177	0030	-0140	33339	714	2684	14410
177	0050	-0142	33534	698	2700	14415
177	0075	-0151		720		
177	0100	-0162	32582	704	2623	14400
177	0150	-0155	33839	695	2725	14429
170	0200	-0083	33931	631	2730	14473
170	0250	0002	34087	576	2739	14522
170	0300	0054	34222	545	2747	14556
170	0400	0142	34418	540	2757	14615
170	0500	0133	34468	535	2762	14628
170	0600	0109	34482	527	2764	14634
170	0700	0084	34483	519	2766	14640
170	0800	0066	34484	508	2767	14648
170	0900	0045	34476	500	2768	14656
170	1000	0028	34467	494	2768	14664
170	1300	0000	34470	393	2770	14702
170	1520	-0027	34484	342	2772	14727

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0043	32363	805	2598	14476	0000	00000	2033
0010	0043	32356	808	2598	14478	0020	00001	2038
0020	0040	32416	805	2603	14479	0041	00004	1991
0030	-0140	33339	714	2684	14410	0057	00008	1215
0050	-0142	33534	698	2700	14415	0080	00017	1064
0075	-0151	3305 I	720	2661	14408	0111	00038	1432
0100	-0162	32582	704	2623	14400	0152	00075	1786
0125	-0165	3315 I	701	2669	14411	0191	00120	1351
0150	-0155	33839	695	2725	14429	0219	00158	0820
0175	-0124 B	3395 I	666	2733	14450	0238	00191	0741
0200	-0083	33931	631	2730	14473	0257	00227	0773
0225	-0039 B	34006	601	2734	14498	0276	00269	0735
0250	0002	34087	576	2739	14522	0295	00313	0694
0300	0054	34222	545	2747	14556	0328	00406	0622
0400	0142	34418	540	2757	14615	0386	00615	0537
0500	0133	34468	535	2762	14628	0438	00855	0496

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0109	34482	527	2764	14634	0487	01130	0469
0700	0084	34483	519	2766	14640	0534	01440	0450
0800	0066	34484	508	2767	14648	0578	01786	0436
1000	0028	34467	494	2768	14665	0665	02588	0420
1200	0008 B	34465	432 B	2769	14689	0749	03533	0405
1500	-0025	34482	349	2772	14725	0865	05146	0362

C-REF-NO 020	YR 1964	DEPTH 1940	WAVES 1 2921	AIR T -09.5	VIS 8
CONS. NO 054	MONTH 9	MXSAMPD 19	WAVES 2 3034	WET B -10.5	STN
LAT 74-460N	DAY 30	NO.DPTH 20	WND-DIR 290	WW-CODE 70	
LON 67-450W	HR 00.8	W-COLOR	WND-SPD 13	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 993.9	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
018	0000	0055	32429	805	2603	14482
018	0005	0056	32426	808	2603	14484
018	0020	-0141	33407	741	2690	14409
018	0030	-0141	33535	753	2700	14412
018	0050	-0168	33641	751	2709	14404
018	0075	-0152	33685	736	2712	14416
018	0100	-0162		725		
018	0150	-0162	33839	699	2725	14426
018	0200	0008 B	33483		2690	14509
018	0250	0138	34277	567	2746	14586
008	0300	0216	34405	581	2750	14631
008	0384	0227	34483	570	2756	14651
008	0483	0153	34471	539	2761	14634
008	0582	0124	34484	532	2764	14638
008	0680	0095	34493	524	2766	14642
008	0779	0073	34491	515	2767	14648
008	0978	0035	34471	498	2768	14664
008	1172	0013	34472	462	2769	14687
008	1470	-0018	34486	357	2772	14723
008	1860	-0039	34492	321	2774	14780

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0055	32429	805	2603	14482	0000	00000	1989
0010	-0006 I	3272 I	786 C	2630	14460	0019	00001	1735
0020	-0141	33407	741	2690	14409	0033	00003	1164
0030	-0141	33535	753	2700	14412	0045	00006	1065
0050	-0168	33641	751	2709	14404	0065	00014	0975
0075	-0152	33685	736	2712	14416	0089	00030	0944
0100	-0162	3378 I	725	2720	14417	0112	00050	0866
0125	-0174 F	3383 I	714	2725	14416	0133	00075	0822
0150	-0162	33839	699	2725	14426	0154	00104	0818
0175	-0085 I	3361 I	661 C	2704	14463	0177	00143	1017
0200	0008 B	33483	626 E	2690	14509	0205	00196	1157
0225	0079	3385 I	595 C	2716	14550	0231	00252	0919
0250	0138	34277	567	2746	14586	0250	00300	0637
0300	0216	34405	581	2750	14631	0282	00388	0603
0400	0217 C	34484	565	2757	14649	0340	00596	0549
0500	0146	34472	537	2761	14634	0393	00841	0503

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0118	34486	531	2764	14639	0442	01119	0473
0700	0090	34493	522	2767	14643	0489	01429	0447
0800	0068	34489	514	2768	14650	0533	01773	0435
1000	0032	34470	495	2768	14666	0620	02574	0421
1200	0010	34473	452	2770	14690	0703	03515	0400
1500	-0019	34482	375 E	2772	14728	0820	05132	0367

C-REF-NO 020	YR 1964	DEPTH 2286	WAVES 1 3221	AIR T -07.9	VIS B
CONS. NO 055	MONTH 9	MXSAMPD 23	WAVES 2 XX	WET B -08.7	STN
LAT 74-130N	DAY 30	NO.DPTH 23	WND-DIR 320	WW-CODE 71	
LON 66-330W	HR 07.1	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 997.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
084	0000	0076	32361	804	2596	14491
084	0010	0075	32356	815	2596	14492
084	0020	0076	32360	810	2596	14494
084	0030		33173	709		
084	0050	-0140	33456	710	2694	14415
084	0075	-0170	33617	732	2707	14407
084	0100	-0174	31951	734	2572	14386
084	0150	-0170	33751	719	2718	14421
084	0200	-0143	33848	678	2725	14444
084	0250	-0044	34003	596	2734	14500
084	0300	0061	34198	555	2745	14559
071	0400	0123	34395	541	2757	14606
071	0500	0133	34474	538	2762	14628
071	0600	0120	34488	526	2764	14639
071	0700	0095	34500	513	2767	14645
071	0800	0072	34490	507	2767	14651
071	0900	0053	34482	488	2768	14659
071	1000	0033	34475	479	2769	14667
071	1300	-0006	34483	388	2771	14700
071	1600	-0033	34489	345	2773	14738
071	1900	-0040	34498	326	2774	14786
071	2200	-0038	34494	316	2774	14838
071	2280	-0038	34492	413	2774	14852

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0076	32361	804	2596	14491	0000	00000	2051
0010	0075	32356	815	2596	14492	0021	00001	2054
0020	0076	32360	810	2596	14494	0041	00004	2052
0030	0011 I	33173	709	2665	14478	0059	00009	1399
0050	-0140	33456	710	2694	14415	0084	00019	1124
0075	-0170	33617	732	2707	14407	0111	00036	0991
0100	-0174	31951	734	2572	14386	0152	00074	2268
0125	-0174	3253 I	730	2619	14398	0203	00133	1821
0150	-0170	33751	719	2718	14421	0237	00180	0883
0175	-0162 B	3390 I	703	2730	14431	0258	00214	0768
0200	-0143	33848	678	2725	14444	0278	00253	0814
0225	-0098 C	33919	637	2730	14470	0298	00297	0775
0250	-0044	34003	596	2734	14500	0317	00343	0734

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	0061	34198	555	2745	14559	0352	00441	0645
0400	0123	34395	541	2757	14606	0412	00653	0540
0500	0133	34474	538	2762	14628	0464	00893	0491
0600	0120	34488	526	2764	14639	0513	01168	0473
0700	0095	34500	513	2767	14645	0559	01478	0446
0800	0072	34490	507	2767	14651	0604	01822	0437
1000	0033	34475	479	2769	14667	0690	02622	0418
1200	0005	34478	421 B	2770	14688	0772	03550	0392
1500	-0026	34487	355	2773	14725	0887	05130	0358
2000	-0040	34498	289 G	2774	14804	1061	08263	0329

C-REF-NO 020	YR 1964	DEPTH 1811	WAVES 1 3321	AIR T -02.1	VIS 7
CONS. NO 056	MONTH 9	MXSAMPD 18	WAVES 2 3133	WET B -03.3	STN
LAT 73-370N	DAY 30	NO.DPTH 20	WND-DIR 330	WW-CODE 70	
LON 69-570W	HR 16.8	W-COLOR	WND-SPD 08	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 998.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
177	0000	0070	32230	808	2586	14486
177	0010	0060	32226	809	2586	14484
177	0020	0060	32221	807	2586	14485
177	0030	-0131	33149	749	2668	14411
177	0050	-0166	33401	750	2690	14402
177	0075	-0167	33603	732	2706	14408
177	0100	-0149	33735	704	2716	14423
177	0150	-0151	33825	692	2724	14431
177	0200	-0114	33901	650	2729	14458
177	0250	-0022	34069	575	2739	14511
168	0300	0058	34209	553	2746	14558
168	0394	0111	34383	539	2756	14600
168	0492	0119	33554	539	2689	14608
168	0592	0117	34504	532	2766	14637
168	0692	0073	34484	518	2767	14634
168	0793	0051	34481	503	2768	14640
168	0993	0024	34476	474	2769	14662
168	1194	0003	34472	409	2770	14686
168	1494	-0028	34481	341	2772	14722
168	1794	-0040	34485	323	2773	14768

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0070	32230	808	2586	14486	0000	00000	2148
0010	0060	32226	809	2586	14484	0022	00001	2146
0020	0060	32221	807	2586	14485	0043	00004	2149
0030	-0131	33149	749	2668	14411	0061	00009	1364
0050	-0166	33401	750	2690	14402	0086	00019	1160
0075	-0167	33603	732	2706	14408	0114	00036	1003
0100	-0149	33735	704	2716	14423	0138	00058	0905
0125	-0149 D	3380 C	696 B	2721	14427	0160	00083	0857
0150	-0151	33825	692	2724	14431	0181	00113	0832
0175	-0138	3386 B	675	2726	14442	0202	00148	0809
0200	-0114	33901	650	2729	14458	0222	00186	0784
0225	-0071 C	3398 B	611	2734	14483	0241	00228	0739
0250	-0022	34069	575	2739	14511	0259	00272	0695
0300	0058	34209	553	2746	14558	0293	00367	0635
0400	0112	3432 I	539	2751	14600	0354	00588	0587
0500	0120	3361 I	539	2694	14611	0441	01002	1128

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0114	3452 D	531	2767	14637	0520	01434	0444
0700	0071	34483	517	2767	14634	0565	01732	0439
0800	0050	34481	502	2768	14641	0609	02070	0426
1000	0023	34476	472	2769	14663	0694	02852	0410
1200	0002	34472	407	2770	14687	0775	03775	0395
1500	-0025 B	34478	343	2772	14725	0891	05377	0365

C-REF-NO 020	YR 1964	DEPTH 1280	WAVES 1 3321	AIR T -03.0	VIS 8
CONS. NO 057	MONTH 9	MXSAMPD 12	WAVES 2 3322	WET B -04.5	STN
LAT 73-200N	DAY 30	NO.DPTH 19	WND-DIR 310	WW-CODE 02	
LON 71-450W	HR 22.9	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 260	C/I 1810	W-TRNSP	BARO 1000.3	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
236	0000	0050	31812	808	2554	14472
236	0005	0043	31823	806	2555	14469
236	0020	-0066	32084	825	2580	14425
236	0030	0022	32340	800	2597	14471
236	0050	-0085	32594	725	2622	14428
236	0075	-0119	32893	689	2647	14421
236	0100	-0120	33102	684	2664	14427
229	0150	-0144	33384	700	2688	14428
229	0200	-0139	33700	685	2713	14443
229	0235	-0144	33842	674	2725	14449
229	0287	-0072	33969	604	2733	14493
229	0387	0023	34228	548	2749	14557
229	0483	0057	34369	550	2759	14590
229	0581	0076	34424	545	2762	14616
229	0676	0082 B	34474	540	2766	14635
229	0778	0070	34472	535	2766	14646
229	0877	0055	34470	518	2767	14656
229	0981	0039	34642	500	2782	14669
229	1248	0001	34472	398	2770	14694

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0050	31812	808	2554	14472	0000	00000	2457
0010	-0002 I	3188 C	814 B	2562	14450	0024	00001	2379
0020	-0066	32084	825	2580	14425	0047	00005	2201
0030	0022	32340	800	2597	14471	0069	00010	2040
0050	-0085	32594	725	2622	14428	0107	00026	1802
0075	-0119	32893	689	2647	14421	0150	00053	1560
0100	-0120	33102	684	2664	14427	0187	00086	1398
0125	-0132 C	3325 C	692	2677	14428	0221	00124	1278
0150	-0144	33384	700	2688	14428	0252	00168	1172
0175	-0142 B	3355 B	694	2701	14435	0280	00214	1045
0200	-0139	33700	685	2713	14443	0304	00262	0929
0225	-0144 B	33807	679	2722	14446	0327	00311	0843
0250	-0127 D	33884	656	2728	14460	0347	00361	0790
0300	-0056	34005	592	2735	14503	0386	00468	0725
0400	0030	34253	547	2751	14562	0452	00702	0584
0500	0061	34382	549	2759	14595	0507	00955	0507
0600	0078	34436	544	2763	14620	0557	01237	0480

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0080 B	34476	539	2766	14638	0604	01551	0452
0800	0067	3447 B	532	2766	14649	0649	01904	0452
1000	0036	3456 I	491	2775	14670	0732	02655	0360
1200	0008	3450 G	420	2772	14689	0806	03502	0376

C-REF-NO 020	YR 1964	DEPTH 2103	WAVES 1 3020	AIR T -03.2	VIS 7
CONS. NO 058	MONTH 10	MXSAMPD 19	WAVES 2 3032	WET B -04.5	STN
LAT 72-470N	DAY 01	NO.DPTH 21	WND-DIR 300	WW-CODE 70	
LON 69-580W	HR 04.7	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1001.4	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
056	0000	0090	32253	804	2587	14496
056	0010	0089	32237	806	2586	14497
056	0020	0087	32271	804	2588	14498
056	0030	-0100	32773	737	2637	14421
056	0050	-0135	32960	696	2653	14410
056	0075	-0159	32082	713	2583	14390
056	0100	-0162	33359	716	2686	14411
056	0150	-0158		710		
056	0200	-0164	33805	698	2723	14433
056	0250	-0147		678		
056	0300	-0043	34062	592	2739	14510
047	0400	0046	34224	550	2748	14569
047	0471	0113	34380	542	2756	14613
047	0558	0128	34452	539	2761	14635
047	0658	0109	34473	530	2764	14644
047	0744	0088	34309	520	2752	14647
047	0920	0047	34452	504	2766	14659
047	1112	0022	34464	473	2768	14681
047	1376	-0011	34476	386	2771	14710
047	1810	-0039	34487	320	2773	14771
047	1905	-0042	34482	321	2773	14786

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0090	32253	804	2587	14496	0000	00000	2141
0010	0089	32237	806	2586	14497	0022	00001	2153
0020	0087	32271	804	2588	14498	0043	00004	2125
0030	-0100	32773	737	2637	14421	0062	00009	1661
0050	-0135	32960	696	2653	14410	0094	00022	1506
0075	-0159	32082	713	2583	14390	0140	00053	2172
0100	-0162	33359	716	2686	14411	0183	00089	1189
0125	-0160	3383 I	714	2724	14423	0208	00118	0828
0150	-0158	34060	710	2743	14431	0227	00144	0650
0175	-0162 B	3405 I	705	2742	14433	0243	00172	0654
0200	-0164	33805	698	2723	14433	0262	00208	0840
0225	-0162 C	33883	693	2729	14439	0282	00253	0780
0250	-0147	3395 B	678	2734	14451	0302	00299	0731
0300	-0043	34062	592	2739	14510	0337	00400	0689
0400	0046	34224	550	2748	14569	0403	00635	0616

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0124 B	34414	541	2758	14623	0461	00900	0529
0600	0123 B	3448 B	536	2763	14640	0512	01188	0482
0700	0099	3439 E	525	2758	14645	0563	01531	0529
0800	0074	3433 I	515	2754	14650	0618	01957	0561
1000	0035	3447 B	494	2768	14668	0718	02869	0426
1200	0010	34469	445	2769	14690	0802	03820	0404
1500	-0022	34483	356	2772	14726	0919	05438	0364

C-REF-NO 020	YR 1964	DEPTH 2468	WAVES 1 2820	AIR T -01.5	VIS 8
CONS. NO 059	MONTH 10	MXSAMPD 23	WAVES 2 3032	WET B -04.0	STN
LAT 73-080N	DAY 01	NO.DPTH 23	WND-DIR 300	WW-CODE 02	
LON 67-490W	HR 11.9	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1002.4	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
130	0000	0111	32139	815	2576	14504
130	0005	0111	32134	791	2576	14505
130	0019	0113	32146	795	2577	14508
130	0029	-0108	32830	715	2642	14417
130	0048	-0127	33072	688	2662	14415
130	0073	-0141	33265	704	2678	14415
130	0097	-0142	33376	698	2687	14420
130	0145	-0156	33690	700	2713	14426
130	0194	-0139	32398	668	2608	14424
130	0250	-0078	33959	606	2732	14484
130	0300	0013	34127	559	2742	14536
119	0400	0117	34392	540	2757	14604
119	0500	0134	34469	536	2762	14629
119	0600	0121	34488	524	2764	14640
119	0700	0098	34496	517	2766	14646
119	0800	0075	34490	506	2767	14653
119	0900	0055	34485	493	2768	14660
119	1000	0039	34476	486	2768	14670
119	1300	-0003	34484	394	2771	14701
119	1600	-0033	34488	351	2773	14738
119	1900	-0042	34493	336	2774	14785
119	2200	-0039	34498	317	2774	14838
119	2350	-0038	34491	321	2773	14864

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0111	32139	815	2576	14504	0000	00000	2240
0010	0132 I	3207 I	794 C	2570	14514	0023	00001	2302
0020	0092 E	3221 E	788	2583	14499	0045	00005	2174
0030	-0116 D	3286 D	711	2645	14414	0064	00009	1589
0050	-0129	33092	689	2664	14415	0095	00022	1407
0075	-0141	33275	704	2679	14416	0128	00043	1261
0100	-0143	3342 F	698	2690	14421	0158	00070	1150
0125	-0151 B	3365 I	700	2709	14425	0185	00101	0970
0150	-0156	3354 I	698	2701	14425	0211	00137	1050
0175	-0149	3285 I	684	2645	14422	0244	00193	1579
0200	-0135	3252 I	662	2618	14429	0287	00276	1831
0225	-0111	3315 I	635	2668	14453	0327	00363	1356
0250	-0078	33959	606	2732	14484	0353	00427	0752

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	0013	34127	559	2742	14536	0389	00527	0669
0400	0117	34392	540	2757	14604	0450	00743	0538
0500	0134	34469	536	2762	14629	0503	00984	0496
0600	0121	34488	524	2764	14640	0551	01260	0474
0700	0098	34496	517	2766	14646	0598	01572	0451
0800	0075	34490	506	2767	14653	0643	01920	0439
1000	0039	34476	486	2768	14670	0730	02726	0422
1200	0010	34479	428 B	2770	14690	0813	03663	0396
1500	-0025	34487	361	2773	14725	0928	05252	0358
2000	-0042	34496	328	2774	14803	1103	08385	0329

C-REF-NO 020	YR 1964	DEPTH 2210	WAVES 1 3320	AIR T -04.0	VIS 8
CONS. NO 060	MONTH 10	MXSAMPD 22	WAVES 2 3032	WET B -04.8	STN
LAT 73-470N	DAY 01	NO.DPTH 20	WND-DIR 330	WW-CODE 02	
LON 65-500W	HR 20.2	W-COLOR	WND-SPD 04	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1004.7	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
211	0000	0027	31713	822	2547	14460
211	0010	0036		815		
211	0020	0063		806		
211	0030	-0099	32997	727	2655	14424
211	0049	-0136	33304	708	2681	14414
211	0074	-0170		737		
211	0098	-0170	33614	736	2707	14411
211	0147	-0167	33756	717	2719	14422
211	0196	-0123	33863	657	2726	14452
211	0295	0052	34183	561	2744	14554
202	0400	0140	34388	557	2755	14614
202	0500	0135	34466	540	2761	14629
202	0600	0117	34511	531	2766	14638
202	0700	0094	34487	518	2766	14644
202	0800	0071	34488	508	2767	14651
202	1000	0035	34478	477	2769	14668
202	1200	0007	34476	409	2770	14689
202	1500	-0028	34483	357	2772	14723
202	2000	-0040	34492	316	2774	14803
202	2200	-0039	34511	323	2775	14838

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0027	31713	822	2547	14460	0000	00000	2522
0010	0036	3218 H	815	2583	14472	0024	00001	2172
0020	0063	3258 I	806	2614	14491	0044	00004	1879
0030	-0099	32997	727	2655	14424	0061	00008	1490
0050	-0138	33315	709	2682	14414	0088	00019	1233
0075	-0170	3352 G	737	2700	14405	0117	00038	1064
0100	-0170	33622	736	2708	14411	0143	00061	0986
0125	-0171 B	3371 B	729	2715	14416	0167	00088	0920
0150	-0165	33763	714	2719	14424	0190	00120	0876
0175	-0146	33817	685	2723	14438	0211	00156	0838
0200	-0116 B	33876	652	2727	14457	0232	00196	0802
0225	-0073 G	3396 C	622	2732	14482	0252	00239	0757
*0250	-0029 H	3404 D	597	2736	14507	0270	00284	0716
0300	0058	34196	560	2745	14558	0305	00381	0645
0400	0140	34388	557	2755	14614	0365	00597	0559
0500	0135	34466	540	2761	14629	0419	00843	0499

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0117	34511	531	2766	14638	0467	01114	0453
0700	0094	34487	518	2766	14644	0513	01421	0455
0800	0071	34488	508	2767	14651	0558	01769	0437
1000	0035	34478	477	2769	14668	0645	02569	0417
1200	0007	34476	409	2770	14689	0727	03500	0396
1500	-0028	34483	357	2772	14724	0842	05089	0359
2000	-0040	34492	316	2774	14803	1018	08247	0333

C-REF-NO 020	YR 1964	DEPTH 247	WAVES 1 3420	AIR T -05.9	VIS 7
CONS. NO 061	MONTH 10	MXSAMPD 02	WAVES 2 00X0	WET B -06.0	STN
LAT 74-280N	DAY 02	NO.DPTH 11	WND-DIR 340	WW-CODE 70	
LON 63-520W	HR 03.4	W-COLOR	WND-SPD 02	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1005.8	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
034	0000	-0151	31615	853	2545	14375
034	0005	-0150	31625	854	2546	14377
034	0010	-0149	31618	857	2545	14378
034	0020	-0118	32799	858	2640	14411
034	0030	-0137	33396	777	2689	14412
034	0050	-0133	33603	734	2705	14420
034	0075	-0091	33733	687	2714	14446
034	0099	-0072	33789	660	2718	14459
034	0149	-0084	33869	650	2725	14463
034	0199	-0037	33949	604	2730	14494
034	0229	-0009	34011	581	2733	14513

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0151	31615	853	2545	14375	0000	00000	2540
0010	-0149	31618	857	2545	14378	0026	00001	2537
0020	-0118	32799	858	2640	14411	0047	00004	1637
0030	-0137	33396	777	2689	14412	0061	00008	1172
0050	-0133	33603	734	2705	14420	0083	00017	1014
0075	-0091	33733	687	2714	14446	0107	00032	0927
0100	-0072	33791	660	2718	14459	0130	00053	0888
0125	-0078 E	33834	653 B	2722	14462	0152	00078	0853
0150	-0083	33870	649	2725	14464	0173	00108	0821
0175	-0063 C	33909	628	2728	14478	0194	00142	0799
0200	-0043 E	33954	608	2730	14492	0213	00180	0773
0225	-0014	34003	585	2733	14510	0233	00222	0750

C-REF-NO 020	YR 1964	DEPTH 715	WAVES 1 3421	AIR T -04.5	VIS 8
CONS. NO 062	MONTH 10	MXSAMPD 07	WAVES 2 3411	WET B -05.2	STN
LAT 74-300N	DAY 02	NO.DPTH 15	WND-DIR 340	WW-CODE 02	
LON 59-250W	HR 11.4	W-COLOR	WND-SPD 09	CLD-TPE 9	
MARSD SQ 258	C/I 1810	W-TRNSP	BARO 1007.5	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
114	0000	-0037	31745		2552	14431
114	0010	-0019	31845		2559	14442
114	0020	-0031	33039		2656	14455
114	0030	-0122	33342		2684	14418
114	0050	-0144	33495		2697	14413
114	0075	-0140	33579		2704	14420
114	0100	-0125	33648		2709	14433
114	0150	-0018	33805		2717	14493
114	0200	0035	33996		2730	14528
114	0250	0080	34155		2740	14559
114	0300	0134	34297		2748	14593
114	0400	0144	34404		2756	14616
114	0500	0124	34463		2762	14624
114	0600	0107	34487		2765	14634
114	0710	0075	34485		2767	14637

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0037	31745		2552	14431	0000	00000	2472
0010	-0019	31845		2559	14442	0025	00001	2402
0020	-0031	33039		2656	14455	0044	00004	1483
0030	-0122	33342		2684	14418	0058	00007	1218
0050	-0144	33495		2697	14413	0081	00017	1093
0075	-0140	33579		2704	14420	0108	00034	1028
0100	-0125	33648		2709	14433	0133	00057	0979
0125	-0075 G	33723		2713	14461	0157	00084	0938
0150	-0018	33805		2717	14493	0180	00117	0900
0175	0012 B	33900		2723	14512	0202	00154	0843
0200	0035	33996		2730	14528	0223	00193	0782
0225	0057	34079		2735	14543	0242	00235	0733
0250	0080	34155		2740	14559	0260	00278	0689
0300	0134	34297		2748	14593	0293	00371	0620
0400	0144	34404		2756	14616	0352	00582	0550
0500	0124	34463		2762	14624	0405	00824	0492
0600	0107	34487		2765	14634	0453	01096	0463
0700	0078	34487		2767	14637	0499	01402	0442

C-REF-NO 020	YR 1964	DEPTH 631	WAVES 1 00X0	AIR T 03.2	VIS 8
CONS. NO 063	MONTH 10	MXSAMPD 06	WAVES 2 2921	WET B -00.8	STN
LAT 74-070N	DAY 02	NO.DPTH 14	WND-DIR 050	WW-CODE 70	
LON 61-125W	HR 16.1	W-COLOR	WND-SPD 01	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1008.1	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
161	0000	-0114	31654		2547	14393
161	0005	-0111	31650		2547	14396
161	0020	-0048	32782		2636	14443
161	0030	-0121	33350		2684	14419
161	0050	-0146	33517		2699	14413
161	0075	-0119	33610		2705	14431
161	0100	-0130	33664		2710	14431
161	0150	-0053	33817		2720	14477
161	0200	0022	34002		2731	14522
161	0250	0058	34123		2739	14548
161	0300	0088	34235		2746	14572
161	0400	0147	34429		2758	14617
161	0495	0112	34480		2764	14618
161	0593	0080	34480		2766	14620

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0114	31654		2547	14393	0000	00000	2518
0010	-0083 I	3195 I		2570	14414	0024	00001	2298
0020	-0048	32782		2636	14443	0044	00004	1673
0030	-0121	33350		2684	14419	0059	00008	1212
0050	-0146	33517		2699	14413	0082	00017	1076
0075	-0119	33610		2705	14431	0108	00034	1011
0100	-0130	33664		2710	14431	0133	00056	0965
0125	-0100 F	33735		2715	14450	0157	00083	0920
0150	-0053	33817		2720	14477	0179	00115	0875
0175	-0013 B	3391 B		2726	14501	0201	00151	0821
0200	0022	34002		2731	14522	0221	00190	0770
0225	0043 B	34067		2735	14537	0240	00231	0733
0250	0058	34123		2739	14548	0258	00275	0699
0300	0088	34235		2746	14572	0291	00370	0634
0400	0147	34429		2758	14617	0350	00579	0533
0500	0127 I	3450 C		2764	14626	0401	00812	0470
0600	0075 B	34475		2766	14619	0447	01074	0448

C-REF-NO 020	YR 1964	DEPTH 651	WAVES 1 00X0	AIR T -03.9	VIS 8
CONS. NO 064	MONTH 10	MXSAMPD 06	WAVES 2 2921	WET B -05.3	STN
LAT 73-450N	DAY 02	NO.DPTH 15	WND-DIR 210	WW-CODE 02	
LON 63-060W	HR 21.4	W-COLOR	WND-SPD 01	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1006.8	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
214	0000	0021	31838	819	2557	14459
214	0010	0041	31818	819	2554	14469
214	0020	-0019	32832	916	2639	14457
214	0030	-0095	33282	830	2678	14430
214	0050	-0144	33443	760	2693	14413
214	0075	-0136	33528	741	2699	14422
214	0100	-0090	33607	702	2704	14448
214	0150	-0002	33814	652	2717	14500
214	0200	-0037	33914	638	2727	14494
214	0250	0047	34108	595	2738	14543
214	0300	0117	34285	527	2748	14585
214	0400	0142	34440	546	2759	14615
214	0500	0139	34486	542	2763	14631
214	0600	0106	34482	520	2765	14633
214	0640	0088	34483	518	2766	14632

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0021	31838	819	2557	14459	0000	00000	2424
0010	0041	31818	819	2554	14469	0025	00001	2448
0020	-0019	32832	916	2639	14457	0045	00004	1646
0030	-0095	33282	830	2678	14430	0060	00008	1273
0050	-0144	33443	760	2693	14413	0084	00018	1133
0075	-0136	33528	741	2699	14422	0112	00035	1069
0100	-0090	33607	702	2704	14448	0138	00059	1022
0125	-0038 E	3371 C	672	2711	14478	0163	00088	0961
0150	-0002	33814	652	2717	14500	0187	00121	0901
0175	-0019 I	3387 C	645	2722	14497	0209	00158	0853
0200	-0037	33914	638	2727	14494	0230	00198	0807
0225	-0002 F	3401 B	620	2733	14516	0249	00241	0754
0250	0047	34108	595	2738	14543	0268	00286	0704
0300	0117	34285	527	2748	14585	0301	00379	0617
0400	0142	34440	546	2759	14615	0358	00583	0521
0500	0139	34486	542	2763	14631	0409	00818	0487
0600	0106	34482	520	2765	14633	0458	01090	0466

C-REF-NO 020	YR 1964	DEPTH 2195	WAVES 1 3221	AIR T -05.5	VIS B
CONS. NO 065	MONTH 10	MXSAMPD 21	WAVES 2 2921	WET B -06.7	STN
LAT 73-140N	DAY 03	NO.DPTH 21	WND-DIR 320	WW-CODE 70	
LON 65-020W	HR 03.6	W-COLOR	WND-SPD 07	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 999.3	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
045	0000	0005	31554	824	2535	14447
045	0010	0004	31544	826	2534	14448
045	0020	0048	31858	856	2557	14475
045	0030	-0146	33157	760	2670	14404
045	0049	-0163	33379	758	2688	14403
045	0074	-0171	33542	742	2701	14405
045	0099	-0168	33631	725	2709	14412
045	0148	-0140	33772	689	2719	14435
045	0197	-0114	33875	649	2727	14457
036	0245	-0003	34040	603	2735	14519
036	0293	0072	34195	576	2744	14563
036	0390	0117	34377	551	2756	14602
036	0490	0132	34471	488	2762	14626
036	0581	0120	34496	525	2765	14636
036	0680	0095	34498	476	2767	14642
036	0775	0066	34482	512	2767	14644
036	0972	0032	34468	491	2768	14662
036	1175	0009	34468	454	2769	14685
036	1470	-0024	34482	357	2772	14720
036	1965	-0039	34493	322	2774	14798
036	2100	-0039	34493	327	2774	14821

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0005	31554	824	2535	14447	0000	00000	2634
0010	0004	31544	826	2534	14448	0027	00001	2641
0020	0048	31858	856	2557	14475	0052	00005	2420
0030	-0146	33157	760	2670	14404	0071	00010	1353
0050	-0164	33388	758	2689	14403	0096	00020	1171
0075	-0171	33546	741	2702	14405	0124	00038	1045
0100	-0168	33634	724	2709	14412	0150	00061	0977
0125	-0155 B	33711	706	2715	14424	0174	00088	0920
0150	-0140	33776	687	2719	14436	0196	00120	0873
0175	-0131 D	3383 B	668	2723	14445	0218	00156	0836
0200	-0108 B	33885	646	2727	14461	0238	00195	0799
0225	-0052 E	33968	621	2732	14492	0258	00238	0758
0250	0006	34057	600	2736	14524	0277	00284	0719
0300	0078 B	34213	574	2745	14567	0311	00380	0645
0400	0120	34390	543	2756	14605	0371	00593	0542

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0132	34476	492	2762	14628	0423	00833	0489
0600	0116	34498	516 B	2765	14638	0471	01104	0462
0700	0089	34495	481	2767	14642	0517	01410	0445
0800	0060	34479	513	2767	14646	0561	01753	0436
1000	0028	34467	487	2768	14665	0648	02555	0420
1200	0006	34469	446	2770	14688	0731	03495	0400
1500	-0026	34483	351	2772	14725	0847	05096	0360
2000	-0040	34493	319	2774	14803	1023	08253	0332

C-REF-NO 020	YR 1964	DEPTH 2413	WAVES 1 2122	AIR T -05.3	VIS 7
CONS. NO 066	MONTH 10	MXSAMPD 23	WAVES 2 2122	WET B -06.2	STN
LAT 72-500N	DAY 03	NO.DPTH 20	WND-DIR 310	WW-CODE 70	
LON 66-480W	HR 09.3	W-COLOR	WND-SPD 12	CLD-TPE 5	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 997.3	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
103	0000	0091	32043	801	2570	14493
103	0010	0095	32041	801	2570	14497
103	0020	0095	32052	800	2570	14499
103	0030	-0019	32629	786	2623	14456
103	0050	-0143	32940	701	2652	14406
103	0073	-0135	33171	678	2670	14417
103	0098	-0149		722		
103	0147	-0156	33595	712	2705	14425
103	0196	-0154	33703	700	2714	14436
103	0293	-0073	33978	607	2734	14493
093	0366	0076	34246	548	2748	14577
093	0465	0121	34398	539	2757	14616
093	0550	0133	34468	534	2762	14637
093	0645	0114	34479	525	2764	14644
093	0736	0092	34494	517	2767	14650
093	0925	0055	34482	490	2768	14664
093	1120	0025	34476	451	2769	14683
093	1414	-0016	34475	378	2771	14714
093	1900	-0041	34482	326	2773	14786
093	2290	-0039	34243	322	2754	14850

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0091	32043	801	2570	14493	0000	00000	2302
0010	0095	32041	801	2570	14497	0023	00001	2305
0020	0095	32052	800	2570	14499	0046	00005	2297
0030	-0019	32629	786	2623	14456	0067	00010	1801
0050	-0143	32940	701	2652	14406	0100	00023	1519
0075	-0136	33188	681	2672	14417	0136	00046	1330
0100	-0150	3337 B	723	2687	14417	0168	00074	1183
0125	-0155	3351 B	724 B	2698	14421	0196	00107	1073
0150	-0156	33603	712	2706	14425	0222	00144	1000
0175	-0157	3366 B	707	2711	14430	0247	00185	0952
0200	-0153	33713	697	2715	14437	0271	00230	0914
0225	-0142	33776	676 B	2720	14447	0293	00279	0868
*0250	-0123 B	33845	653 B	2725	14461	0314	00331	0820
0300	-0058 C	34005	600	2735	14502	0353	00440	0724
0400	0104 F	3432 B	540	2752	14596	0419	00674	0585
0500	0129	34434	537	2759	14626	0475	00931	0518

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0125	34478	529	2763	14642	0526	01217	0485
0700	0101	34489	520	2766	14647	0574	01535	0459
0800	0078	34493	509	2767	14654	0619	01885	0440
1000	0043	34479	476	2768	14671	0706	02693	0423
1200	0013	34475	430	2770	14691	0790	03637	0401
1500	-0023	3449 C	364	2773	14726	0906	05236	0359
2000	-0045 B	3440 I	318	2766	14800	1098	08733	0398

C-REF-NO 020	YR 1964	DEPTH 2423	WAVES 1 3121	AIR T -05.8	VIS 8
CONS. NO 067	MONTH 10	MXSAMPD 23	WAVES 2 3034	WET B -07.0	STN
LAT 72-260N	DAY 03	NO.DPTH 22	WND-DIR 310	WW-CODE 02	
LON 67-220W	HR 15.2	W-COLOR	WND-SPD 10	CLO-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 998.0	CLO-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
161	0000	0056	32120		2578	14479
161	0010	0057	32299		2592	14483
161	0020	0056	32117		2578	14482
161	0030	-0086	32691		2630	14426
161	0050	-0155	33088		2664	14402
161	0075	-0167	33258		2678	14403
161	0100	-0163	33439		2693	14412
161	0150	-0161	33666		2711	14424
161	0200	-0164	33766		2719	14432
161	0250	-0136	33868		2727	14455
152	0295	-0105	33919		2730	14478
152	0390	0060	34244		2748	14574
152	0485	0133	34437	544	2759	14625
152	0586	0128	34487	527	2764	14641
152	0678	0107	34490	525	2765	14647
152	0771	0081	34491	511	2767	14650
152	0965	0044	34480	489	2768	14666
152	1161	0015	34475	434	2770	14686
152	1476	-0021	34481	367	2772	14723
152	1980	-0041	34509	328	2775	14800
152	2072	-0039	34498	322	2774	14816
152	2304	-0038	34497	324	2774	14856

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0056	32120		2578	14479	0000	00000	2225
0010	0057	32299		2592	14483	0022	00001	2089
0020	0056	32117		2578	14482	0043	00004	2227
0030	-0086	32691		2630	14426	0063	00009	1728
0050	-0155	33088		2664	14402	0095	00022	1403
0075	-0167	33258		2678	14403	0128	00043	1267
0100	-0163	33439		2693	14412	0159	00070	1128
0125	-0161	33572		2704	14419	0186	00101	1025
0150	-0161	33666		2711	14424	0211	00136	0951
0175	-0164 B	3372 B		2716	14428	0234	00175	0904
0200	-0164	33766		2719	14432	0256	00218	0870
0225	-0152	33820		2723	14443	0278	00265	0831
0250	-0136	33868		2727	14455	0298	00315	0798
0300	-0097 B	3393 B		2731	14483	0338	00426	0761

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0072	34271		2750	14581	0406	00669	0597
0500	0136 B	34451	542	2760	14629	0462	00925	0510
0600	0125	34489	527	2764	14642	0512	01207	0477
0700	0101	34491	522	2766	14648	0559	01522	0458
0800	0074	34490	508	2767	14652	0605	01871	0439
1000	0038	34479	480	2769	14669	0692	02675	0420
1200	0010	34475	424	2770	14690	0775	03612	0399
1500	-0022	34483	364	2772	14726	0891	05218	0363
2000	-0041	34507	327	2775	14803	1065	08335	0322

C-REF-NO 020	YR 1964	DEPTH 2286	WAVES 1 3420	AIR T -03.6	VIS 8
CONS. NO 068	MONTH 10	MXSAMPD 22	WAVES 2 3432	WET B -05.0	STN
LAT 72-030N	DAY 03	NO.DPTH 20	WND-DIR 340	WW-CODE 70	
LON 68-280W	HR 20.0	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1001.4	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
210	0000	0076	31926		2561	14485
210	0010	0078	31927		2561	14488
210	0020	0129	32085		2571	14514
210	0028	-0082	32959		2652	14431
210	0047	-0160	33407		2690	14404
210	0071	-0159	33585		2705	14411
210	0094	-0162	33697		2714	14415
210	0141	-0156	33850		2726	14428
210	0188	-0090	33933		2731	14468
210	0282	0064	34250		2749	14558
200	0392	0127	34412		2758	14607
200	0486	0129	34474	537	2762	14624
200	0580	0107	34481	528	2765	14630
200	0679	0088	34473	518	2765	14638
200	0774	0067	34480	507	2767	14644
200	0967	0033	34472	488	2768	14661
200	1165	0010	34472	416	2770	14684
200	1463	-0027		361		
200	1956	-0040	34472	314	2772	14795
200	2225	-0039	34483	321	2773	14842

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0076	31926		2561	14485	0000	00000	2383
0010	0078	31927		2561	14488	0024	00001	2383
0020	0129	32085		2571	14514	0047	00005	2291
0030	-0106 H	3307 I		2661	14422	0066	00009	1434
0050	-0163 B	3344 B		2693	14404	0092	00020	1128
0075	-0160	33607		2706	14412	0119	00037	1001
0100	-0163	33721		2716	14416	0143	00058	0911
0125	-0162 B	33808		2723	14421	0165	00084	0844
0150	-0146 B	33867		2727	14434	0186	00113	0802
0175	-0112 B	3391 B		2730	14455	0206	00146	0778
0200	-0069 B	3397 B		2733	14480	0225	00183	0748
0225	-0026 E	3406 E		2738	14505	0243	00223	0704
*0250	0015 E	3414 E		2743	14529	0261	00265	0661
0300	0081 B	34288		2751	14569	0292	00354	0590
0400	0129	34420		2758	14609	0348	00555	0526
0500	0126	34477	536	2763	14625	0399	00790	0483

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0103	34479	526	2765	14632	0447	01061	0466
0700	0083	34474	516	2765	14639	0494	01372	0456
0800	0062	34480	506	2767	14647	0539	01720	0436
1000	0029	34472	477	2769	14665	0626	02519	0417
1200	0005	34471	407	2770	14688	0708	03453	0398
1500	-0029	34469	355	2771	14723	0825	05067	0368
2000	-0044 C	34476	316	2773	14801	1005	08300	0341

C-REF-NO 020	YR 1964	DEPTH 2377	WAVES 1 0220	AIR T -04.2	VIS 7
CONS. NO 069	MONTH 10	MXSAMPD 23	WAVES 2 3432	WET B -05.4	STN
LAT 71-540N	DAY 04	NO.DPTH 22	WND-DIR 020	WW-CODE 70	
LON 67-100W	HR 01.1	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1002.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
020	0000	0109	31903		2558	14500
020	0010	0107	31921		2559	14501
020	0020	0103	31923		2560	14500
020	0030	0111	32163		2578	14509
020	0049	-0135	33152		2669	14413
020	0074	-0144	33330		2683	14415
020	0098	-0159	33098		2665	14409
020	0148	-0152	33754		2718	14429
020	0197	-0111	33918		2730	14459
020	0246	-0039	34049		2738	14502
011	0297	0037	34189		2745	14548
011	0397	0123	34401		2757	14606
011	0496	0132	34469	535	2762	14627
011	0595	0112	34493	526	2765	14635
011	0694	0091	34491	515	2766	14642
011	0792	0066	34479	503	2767	14647
011	0990	0033	34476	477	2769	14665
011	1190	0007	34474	413	2770	14687
011	1482	-0028	34479	358	2772	14720
011	1975	-0041	34492	323	2774	14799
011	2172	0014	34489	390	2771	14857
011	2270	-0038	34485	343	2773	14850

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0109	31903		2558	14500	0000	00000	2418
0010	0107	31921		2559	14501	0024	00001	2403
0020	0103	31923		2560	14500	0048	00005	2399
0030	0111	32163		2578	14509	0072	00011	2221
0050	-0139 C	3318 B		2671	14411	0108	00025	1340
0075	-0145	3332 B		2683	14415	0140	00045	1225
0100	-0160	3311 D		2666	14409	0173	00075	1378
0125	-0161	3339 I		2689	14416	0205	00112	1166
0150	-0151	33766		2719	14430	0230	00147	0878
0175	-0133	3388 F		2727	14444	0252	00183	0798
0200	-0107	33926		2731	14462	0271	00221	0767
0225	-0072	33995		2735	14483	0290	00262	0728
0250	-0033	34060		2738	14506	0308	00305	0696
0300	0041	34197		2746	14550	0342	00400	0633

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0124	34404		2757	14607	0401	00609	0534
0500	0131	34471	535	2762	14628	0452	00848	0492
0600	0111	34493	525	2765	14635	0501	01120	0462
0700	0089	34490	514	2766	14642	0547	01427	0449
0800	0064	34479	502	2767	14648	0592	01774	0439
1000	0032	34476	474	2769	14666	0678	02574	0416
1200	0006	34474	411	2770	14688	0761	03505	0396
1500	-0031	34480	354	2772	14722	0875	05095	0359
2000	-0029 E	34492	336 B	2773	14808	1054	08308	0344

C-REF-NO 020	YR 1964	DEPTH 2348	WAVES 1 3321	AIR T -04.2	VIS 8
CONS. NO 070	MONTH 10	MXSAMPD 23	WAVES 2 XX	WET B -05.5	STN
LAT 72-140N	DAY 04	NO.DPTH 20	WND-DIR 330	WW-CODE 70	
LON 66-020W	HR 07.1	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 1001.7	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
082	0000	0123	32019		2566	14507
082	0005	0124	32006		2565	14509
082	0020	0126	32012		2565	14512
082	0030	0132	30752		2464	14499
082	0050	-0141	33163		2670	14410
082	0074	-0164	32164		2590	14389
082	0099	-0163	33584		2705	14414
082	0148	-0156	33782		2720	14428
082	0197	-0116	33892		2728	14456
082	0296	0028	32925		2644	14526
071	0399	0078	34336		2755	14585
071	0500	0115	34193	540	2741	14616
071	0587	0115	34490	534	2765	14635
071	0690	0100	34495	527	2766	14645
071	0790	0069	34482	503	2767	14648
071	0988	0032	33482	487	2689	14651
071	1195	0009	34472	423	2770	14689
071	1496	-0026	34481	358	2772	14724
071	1982	-0040	34549	314	2778	14801
071	2310	-0038	34490	322	2773	14857

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0123	32019		2566	14507	0000	00000	2338
0010	0124	3213 I		2575	14511	0023	00001	2254
0020	0126	32012		2565	14512	0046	00005	2345
0030	0132	30752		2464	14499	0075	00012	3307
0050	-0141	33163		2670	14410	0122	00029	1349
0075	-0164	3221 G		2593	14390	0165	00058	2077
0100	-0163	3361 D		2706	14414	0203	00091	1000
0125	-0162	3391 I		2731	14423	0226	00117	0767
0150	-0155	33791		2721	14429	0246	00146	0857
0175	-0137	3387 D		2727	14442	0267	00180	0799
0200	-0112	3386 F		2725	14458	0287	00220	0818
0225	-0075 F	3358 I		2702	14476	0311	00271	1040
*0250	-0038 G	3333 I		2680	14493	0340	00342	1248
0300	0031	3297 H		2648	14528	0410	00544	1556
0400	0078	34337		2755	14585	0517	00900	0552

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0115	34193	540	2741	14616	0579	01194	0689
0600	0114	3450 B	534	2766	14637	0637	01515	0458
0700	0097	3450 B	525	2767	14646	0683	01821	0446
0800	0067	3442 I	502	2763	14648	0730	02184	0482
1000	0030	3352 I	484	2692	14652	0893	03761	1129
1200	0008	3448 B	422	2770	14689	1047	05432	0395
1500	-0026	34482	357	2772	14724	1162	07025	0361
2000	-0044 C	3452 F	313	2776	14802	1333	10070	0310

C-REF-NO 020	YR 1964	DEPTH 2360	WAVES 1 3121	AIR T -05.5	VIS 8
CONS. NO 071	MONTH 10	MXSAMPD 22	WAVES 2 3233	WET B -07.0	STN
LAT 72-310N	DAY 04	NO.DPTH 22	WND-DIR 310	WW-CODE 02	
LON 64-550W	HR 13.8	W-COLOR	WND-SPD 08	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 998.6	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
147	0000	0044	31923		2563	14470
147	0010	0044	31919		2562	14472
147	0020	0044	31917		2562	14474
147	0029	-0133	32983		2655	14408
147	0049	-0161	33224		2675	14401
147	0073	-0166	32969		2655	14399
147	0098	-0167	33514		2699	14411
147	0147	-0163	33709		2715	14423
147	0196	-0135	33832		2724	14446
147	0245	-0076	33963		2732	14484
138	0290	-0028	34047		2737	14515
138	0382	0105	34343		2754	14594
138	0476	0132	34454	536	2761	14624
138	0573	0125	34425	525	2759	14636
138	0657	0108	34505	522	2766	14644
138	0757	0085	34490	511	2767	14650
138	0941	0044	34478	486	2768	14662
138	1135	0018	34445	438	2767	14682
138	1431	-0019	34426	367	2767	14715
138	1919	-0042	34466	332	2772	14788
138	2111	-0039	34498	322	2774	14823
138	2210	-0038	34480	323	2773	14840

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0044	31923		2563	14470	0000	00000	2369
0010	0044	31919		2562	14472	0024	00001	2372
0020	0044	31917		2562	14474	0048	00005	2373
0030	-0141 D	3304 G		2660	14405	0067	00010	1449
0050	-0162	3321 C		2674	14401	0095	00021	1306
0075	-0166	3300 E		2658	14400	0130	00043	1463
0100	-0167	3353 C		2701	14411	0161	00071	1054
0125	-0167	3370 I		2714	14418	0186	00100	0927
0150	-0162	33717		2715	14424	0209	00133	0911
0175	-0150	33783		2720	14435	0232	00170	0863
0200	-0131	33843		2725	14449	0253	00211	0822
0225	-0102 B	33912		2729	14468	0273	00255	0779
0250	-0071	33972		2733	14487	0292	00302	0745
0300	-0012 C	3408 B		2739	14524	0329	00404	0691

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0116 B	34377		2756	14603	0391	00625	0548
0500	0133	3445 C	534	2760	14628	0445	00872	0511
0600	0120	3445 B	524	2761	14639	0496	01161	0501
0700	0098	3451 B	518	2767	14647	0544	01479	0444
0800	0075	34487	506	2767	14652	0589	01825	0441
1000	0035	34468	473	2768	14668	0676	02635	0425
1200	0009	34438	421	2767	14689	0762	03612	0426
1500	-0025	34427	359	2768	14724	0888	05361	0403
2000	-0041	3448 B	327	2773	14803	1077	08715	0338

C-REF-NO 020	YR 1964	DEPTH 2359	WAVES 1 3521	AIR T -04.8	VIS 8
CONS. NO 072	MONTH 10	MXSAMPD 23	WAVES 2 3133	WET B -06.0	STN
LAT 72-000N	DAY 04	NO.DPTH 20	WND-DIR 350	WW-CODE 02	
LON 64-550W	HR 18.4	W-COLOR	WND-SPD 09	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 997.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
196	0000	0053	32078		2575	14477
196	0010	0054	31376		2518	14469
196	0020	0053	32075		2575	14480
196	0030	-0144	33074		2663	14404
196	0050	-0169	33302		2682	14399
196	0075	-0170	33490		2697	14405
196	0091	-0165	33593		2705	14412
196	0149	-0167	33655		2710	14421
196	0199	-0140	33784		2720	14444
196	0298	0003	34108		2741	14531
184	0400	0103	32792		2629	14575
184	0500	0130	34458	539	2761	14627
184	0600	0126	34493	525	2764	14642
184	0700	0104	34510	522	2767	14649
184	0800	0077	34488	509	2767	14653
184	1000	0041	34472	489	2768	14670
184	1200	0017	34476	432	2770	14693
184	1500	-0021	34477	371	2772	14727
184	2000	-0040	34492	322	2774	14803
184	2350	-0038	34490	321	2773	14864

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0053	32078		2575	14477	0000	00000	2255
0010	0054	31376		2518	14469	0025	00001	2792
0020	0053	32075		2575	14480	0051	00005	2257
0030	-0144	33074		2663	14404	0069	00010	1418
0050	-0169	33302		2682	14399	0096	00021	1235
0075	-0170	33490		2697	14405	0125	00039	1089
0100	-0165 B	3362 D		2707	14413	0151	00062	0992
0125	-0166 C	3365 H		2710	14417	0176	00091	0961
0150	-0167	33657		2711	14421	0200	00125	0956
0175	-0157	33716		2715	14431	0224	00164	0912
0200	-0139	33791		2721	14445	0246	00207	0859
0225	-0106 E	3394 I		2732	14466	0267	00251	0755
*0250	-0071 G	3404 I		2739	14488	0285	00296	0691
0300	0006	3408 E		2738	14532	0320	00395	0704
0400	0103	32792		2629	14575	0443	00865	1736
0500	0130	34458	539	2761	14627	0556	01355	0501

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0126	34493	525	2764	14642	0605	01633	0474
0700	0104	34510	522	2767	14649	0652	01943	0446
0800	0077	34488	509	2767	14653	0697	02289	0442
1000	0041	34472	489	2768	14670	0784	03103	0427
1200	0017	34476	432	2770	14693	0869	04054	0404
1500	-0021	34477	371	2772	14727	0986	05683	0369
2000	-0040	34492	322	2774	14803	1165	08881	0333

C-REF-NO 020	YR 1964	DEPTH 2314	WAVES 1 3521	AIR T -05.5	VIS 8
CONS. NO 073	MONTH 10	MXSAMPD 22	WAVES 2 3133	WET B -05.8	STN
LAT 71-540N	DAY 05	NO.DPTH 22	WND-DIR 350	WW-CODE 02	
LON 63-490W	HR 00.0	W-COLOR	WND-SPD 12	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 994.9	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
009	0000	0036	31799		2553	14465
009	0005	0036	31794		2553	14466
009	0019	0031	31809		2554	14466
009	0029	-0155	33189		2672	14400
009	0048	-0166	33389		2689	14401
009	0072	-0151	33539		2701	14414
009	0097	-0171	33590		2705	14410
009	0145	-0158	33653		2710	14425
009	0193	-0135	33795		2721	14445
009	0242	-0036	33960		2731	14502
000	0297	-0001	34070		2738	14529
000	0397	0104	34355		2755	14597
000	0497	0131	34466	535	2762	14627
000	0590	0117	34486	525	2764	14636
000	0685	0098	34515	516	2768	14644
000	0788	0074	34488	505	2767	14650
000	0983	0037	34480	484	2769	14666
000	1182	0011	34481	423	2770	14688
000	1481	-0026	34490	357	2773	14721
000	1975	-0041	34496	322	2774	14799
000	2068	-0040	34496	321	2774	14815
000	2194	-0037	34520	321	2776	14838

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0036	31799		2553	14465	0000	00000	2460
0010	0052 I	3167 I		2542	14472	0025	00001	2567
0020	0013 D	3194 I		2566	14460	0050	00005	2341
0030	-0161 D	3324 I		2677	14398	0068	00009	1286
0050	-0165	33406		2690	14402	0093	00019	1157
0075	-0153	33548		2701	14414	0121	00037	1048
0100	-0171	33593		2706	14410	0147	00060	1007
0125	-0168 B	3363 B		2708	14416	0172	00089	0982
0150	-0158	33665		2711	14426	0196	00124	0952
0175	-0149 C	33736		2717	14435	0219	00162	0900
0200	-0121 C	33820		2722	14453	0241	00205	0843
0225	-0071 E	33905		2728	14482	0262	00250	0797
0250	-0029 B	33977		2732	14507	0282	00298	0761
0300	0002	34079		2738	14531	0318	00401	0700

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0106	34360		2755	14598	0382	00625	0554
0500	0131	34467	535	2762	14627	0435	00869	0495
0600	0115	34490	524	2765	14637	0483	01143	0467
0700	0095	34512	514	2768	14645	0529	01448	0436
0800	0071	34487	504	2767	14651	0573	01789	0439
1000	0035	34480	479	2769	14668	0660	02589	0416
1200	0008	34481	418	2770	14690	0742	03515	0393
1500	-0027	34488	355	2773	14724	0856	05091	0355
2000	-0041	34495	322	2774	14803	1030	08219	0330

C-REF-NO 020	YR 1964	DEPTH 2323	WAVES 1 3533	AIR T -03.2	VIS 8
CONS. NO 074	MONTH 10	MXSAMPD 23	WAVES 2 3133	WET B -03.3	STN
LAT 71-300N	DAY 05	NO.DPTH 23	WND-DIR 350	WW-CODE 02	
LON 64-550W	HR 06.1	W-COLOR	WND-SPD 12	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 992.2	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
070	0000	0056	31977	811	2567	14477
070	0010	0055	31974	809	2566	14478
070	0020	0056	31970	810	2566	14480
070	0030	-0135	32708	774	2633	14403
070	0049	-0154	33098	716	2665	14403
070	0074	-0171	33241	734	2677	14401
070	0099	-0168	33363	743	2687	14408
070	0148	-0174	33604	753	2706	14417
070	0197	-0151	33762	693	2719	14438
070	0246	-0122	33883	642	2728	14462
070	0295	-0050	34035	588	2737	14505
061	0398	0082	34301	543	2752	14586
061	0498	0129	34450	537	2761	14626
061	0596	0126	34500	527	2765	14642
061	0695	0104	34501	521	2766	14648
061	0794	0083	34494	512	2767	14655
061	0892	0058	34484	502	2768	14660
061	0990	0040	34490	489	2769	14669
061	1286	-0002	34479	399	2771	14699
061	1584	-0032	34487	350	2773	14736
061	1880	-0042	34498	333	2774	14782
061	2117	-0038	34500	322	2774	14824
061	2285	-0037	34500	325	2774	14854

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0056	31977	811	2567	14477	0000	00000	2334
0010	0055	31974	809	2566	14478	0023	00001	2336
0020	0056	31970	810	2566	14480	0047	00005	2339
0030	-0135	32708	774	2633	14403	0067	00010	1701
0050	-0155	33108	716	2666	14403	0098	00022	1387
0075	-0171	33246	734	2677	14401	0132	00044	1276
0100	-0168	33368	744	2687	14408	0163	00071	1181
0125	-0172 B	33496	753	2698	14412	0191	00104	1080
0150	-0173	33612	751	2707	14418	0217	00141	0989
0175	-0163	33698	724	2714	14428	0242	00181	0924
0200	-0150	33769	690	2719	14439	0264	00224	0872
0225	-0137 B	33832	663	2724	14450	0286	00271	0827
0250	-0117	33895	637	2728	14465	0306	00321	0785

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	-0042	34050	584	2738	14510	0343	00426	0698
0400	0084	34305	543	2752	14587	0408	00655	0580
0500	0129	34452	537	2761	14626	0463	00906	0505
0600	0125	34501	527	2765	14642	0512	01183	0468
0700	0103	34501	521	2766	14649	0558	01494	0452
0800	0081	34493	511	2767	14656	0604	01842	0442
1000	0038	34490	486	2769	14670	0690	02639	0411
1200	0009	34483	427 B	2771	14690	0771	03559	0392
1500	-0025	34484	360	2772	14725	0886	05145	0361
2000	-0040	34500	326	2774	14803	1060	08279	0327

C-REF-NO 020	YR 1964	DEPTH 2268	WAVES 1 3433	AIR T -03.9	VIS 8
CONS. NO 075	MONTH 10	MXSAMPD 22	WAVES 2 3433	WET B -04.9	STN
LAT 71-200N	DAY 05	NO.DPTH 22	WND-DIR 010	WW-CODE 02	
LON 63-450W	HR 10.2	W-COLOR	WND-SPD 11	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 990.9	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
112	0000	0106	31790		2549	14497
112	0010	0107	31790		2549	14499
112	0020	0105	31794		2549	14500
112	0030	-0014	32522		2614	14457
112	0050	-0143	33022		2659	14407
112	0075	-0168	33289		2681	14403
112	0100	-0163	33425		2692	14412
112	0150	-0153	33672		2711	14428
112	0200	-0137	33829		2724	14446
112	0250	-0093	33953		2732	14477
102	0295	-0038	34345		2762	14515
102	0394	0093	34346		2755	14591
102	0494	0131	34462	538	2761	14626
102	0592	0124	34495	529	2764	14640
102	0690	0103	34507	519	2767	14647
102	0789	0078	34497	510	2768	14652
102	0986	0041	34481	486	2769	14668
102	1185	0011	34480	423	2770	14688
102	1484	-0026	34495	362	2773	14722
102	1982	-0041	34502	321	2774	14800
102	2082	-0039	34498	321	2774	14818
102	2181	-0038	34504	323	2775	14835

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0106	31790		2549	14497	0000	00000	2503
0010	0107	31790		2549	14499	0025	00001	2503
0020	0105	31794		2549	14500	0050	00005	2499
0030	-0014	32522		2614	14457	0072	00011	1885
0050	-0143	33022		2659	14407	0106	00024	1456
0075	-0168	33289		2681	14403	0140	00045	1243
0100	-0163	33425		2692	14412	0170	00072	1139
0125	-0158	33556		2702	14420	0197	00104	1037
0150	-0153	33672		2711	14428	0223	00139	0949
0175	-0147	33758		2718	14436	0246	00177	0883
0200	-0137	33829		2724	14446	0267	00219	0831
0225	-0118	3387 E		2727	14460	0288	00264	0803
0250	-0093	33953		2732	14477	0307	00312	0750
0300	-0030	3436 D		2762	14520	0338	00397	0470

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0097	34353		2755	14594	0390	00585	0554
0500	0131	34465	537	2762	14628	0443	00829	0496
0600	0123	34497	528	2765	14641	0492	01104	0468
0700	0100	34506	518	2767	14648	0538	01412	0445
0800	0076	34496	509	2768	14653	0582	01756	0435
1000	0039	34481	482	2769	14670	0669	02555	0419
1200	0009	34481	419	2770	14690	0751	03485	0394
1500	-0027	34496	360	2773	14724	0864	05050	0350
2000	-0041	34501	321	2774	14803	1036	08135	0326

C-REF-NO 020	YR 1964	DEPTH 1903	WAVES 1 0222	AIR T -02.0	VIS 8
CONS. NO 076	MONTH 10	MXSAMPD 19	WAVES 2 3538	WET B -02.5	STN
LAT 71-030N	DAY 05	NO.DPTH 20	WND-DIR 020	WW-CODE 01	
LON 62-130W	HR 16.5	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 990.5	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
176	0000	0044	31114	819	2498	14459
176	0005	0043	31717	819	2546	14468
176	0020	-0021	31810	831	2557	14442
176	0030	-0100	32934	905	2650	14423
176	0050	-0149	33500	803	2697	14411
176	0075	-0155	33592	745	2705	14414
176	0100	-0158	33625	732	2708	14417
176	0150	-0065	33792	683	2718	14471
176	0200	-0033	33951	644	2730	14496
176	0250	0042	34112	607	2739	14541
165	0294	0122	34271	593	2747	14587
165	0394	0186	34383	579	2751	14633
165	0492	0151	34503	552	2763	14635
165	0591	0096	34483	527	2765	14627
165	0691	0071	34483	520	2767	14632
165	0790	0053	34482	507	2768	14641
165	0990	0027	34471	482	2769	14662
165	1189	0006	34489	428	2771	14687
165	1488	-0024	34486	335	2772	14723
165	1862	-0036	34502	319	2774	14782

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0044	31114	819	2498	14459	0000	00000	2988
0010	0030	3179 I	815 B	2552	14464	0027	00001	2468
0020	-0021	31810	831	2557	14442	0052	00005	2427
0030	-0100	32934	905	2650	14423	0072	00010	1538
0050	-0149	33500	803	2697	14411	0098	00020	1088
0075	-0155	33592	745	2705	14414	0125	00037	1014
0100	-0158	33625	732	2708	14417	0150	00060	0986
0125	-0116 H	3370 B	709	2713	14442	0174	00088	0940
0150	-0065	33792	683	2718	14471	0198	00120	0889
0175	-0048 D	33872	663	2724	14484	0219	00156	0834
0200	-0033	33951	644	2730	14496	0240	00196	0780
0225	0001	34030	624	2734	14517	0259	00237	0737
0250	0042	34112	607	2739	14541	0277	00281	0698
0300	0130	34282	592	2747	14591	0310	00375	0628
0400	0186	34392	578	2752	14634	0372	00596	0592
0500	0146	34504	550	2764	14635	0426	00843	0479

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0093	34483	526	2766	14627	0473	01110	0456
0700	0069	34483	519	2767	14633	0518	01412	0439
0800	0051	34481	506	2768	14642	0562	01750	0427
1000	0026	34472	480	2769	14664	0647	02539	0415
1200	0005	34489	424	2771	14688	0728	03453	0384
1500	-0022 B	3450 B	348 C	2773	14727	0841	05011	0355

C-REF-NO 020	YR 1964	DEPTH 654	WAVES 1 3546	AIR T 02.0	VIS 6
CONS. NO 077	MONTH 10	MXSAMPD 06	WAVES 2 3546	WET B 01.1	STN
LAT 70-380N	DAY 05	NO.DPTH 15	WND-DIR 020	WW-CODE 71	
LON 60-000W	HR 22.8	W-COLOR	WND-SPD 11	CLD-TPE 5	
MARSD SQ 259	C/I 1810	W-TRNSP	BARO 988.8	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
228	0000	0051	31339	827	2516	14466
228	0010	0054	31452	834	2524	14470
228	0020	-0068	33263	876	2676	14441
228	0030	-0120	33388	820	2688	14420
228	0050	-0153	33536	746	2700	14410
228	0074	-0155	33617	744	2707	14414
228	0099	-0140	33666	732	2711	14426
228	0150	-0028	33879	663	2724	14489
228	0200	-0001	34026	620	2734	14512
228	0250	0109	34221	603	2744	14573
228	0300	0173	34373	589	2751	14612
228	0400	0179	34504	566	2761	14633
228	0500	0133	34504	542	2765	14629
228	0600	0098	34500	525	2767	14630
228	0645	0091		516		

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0051	31339	827	2516	14466	0000	00000	2819
0010	0054	31452	834	2524	14470	0028	00001	2734
0020	-0068	33263	876	2676	14441	0048	00004	1297
0030	-0120	33388	820	2688	14420	0061	00007	1183
0050	-0153	33536	746	2700	14410	0083	00016	1059
0075	-0155	33619	744	2707	14414	0109	00033	0994
0100	-0138	33670	731	2711	14427	0134	00055	0958
0125	-0084 H	3377 C	699	2717	14457	0157	00082	0899
0150	-0028	33879	663	2724	14489	0179	00113	0839
0175	-0015 G	3395 B	638	2729	14501	0200	00147	0788
0200	-0001	34026	620	2734	14512	0219	00184	0740
0225	0052 E	34123	610	2739	14541	0237	00223	0695
0250	0109	34221	603	2744	14573	0254	00265	0659
0300	0173	34373	589	2751	14612	0286	00354	0592
0400	0179	34504	566	2761	14633	0341	00550	0502
0500	0133	34504	542	2765	14629	0390	00776	0469
0600	0098	34500	525	2767	14630	0436	01037	0447

C-REF-NO 020	YR 1964	DEPTH 134	WAVES 1 3620	AIR T 04.0	VIS 8
CONS. NO 078	MONTH 10	MXSAMPD 01	WAVES 2 3534	WET B 03.5	STN
LAT 70-000N	DAY 06	NO.DPTH 8	WND-DIR 360	WW-CODE 02	
LON 56-000W	HR 07.5	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 258	C/I 1810	W-TRNSP	BARO 987.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
075	0000	0218	33176	770	2652	14566
075	0010	0219	33176	769	2652	14568
075	0020	0217	33191	769	2653	14569
075	0030	0224	33234	765	2656	14574
075	0049	0007	33453	744	2688	14483
075	0074	0046	33694	664	2705	14508
075	0099	0057	33741	642	2708	14518
075	0122	0086	33809	613	2712	14536

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0218	33176	770	2652	14566	0000	00000	1521
0010	0219	33176	769	2652	14568	0015	00001	1522
0020	0217	33191	769	2653	14569	0031	00003	1510
0030	0224	33234	765	2656	14574	0046	00007	1483
0050	0005 C	33465	741	2689	14482	0072	00018	1173
0075	0047	33697	663	2705	14508	0100	00035	1016
0100	0066 E	3378 H	630 B	2711	14522	0125	00057	0965

C-REF-NO 020	YR 1964	DEPTH 1579	WAVES 1 1120	AIR T 03.6	VIS 7
CONS. NO 079	MONTH 10	MXSAMPD 16	WAVES 2 3224	WET 8 03.5	STN
LAT 69-000N	DAY 06	NO.DPTH 19	WND-DIR 110	WW-CODE 01	
LON 60-000W	HR 16.8	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 988.8	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
177	0000	0082	31954	808	2563	14488
177	0005	0082	31941	808	2562	14489
177	0020	0075	32216	814	2585	14492
177	0030	0053	32654	812	2621	14490
177	0050	-0064	33260	785	2675	14447
177	0075	-0119	33498	745	2696	14429
177	0099	-0009	33654	739	2705	14486
168	0149	0049	33872	648	2719	14524
168	0199	0010	34007	644	2732	14517
168	0249	0011	34109	582	2740	14527
168	0298	0061		560		
168	0397	0244	34422	541	2749	14659
168	0498	0100	34447	538	2762	14613
168	0598	0101	34485	527	2765	14631
168	0697	0080	34482	520	2766	14638
168	0798	0064	34478	451	2767	14647
168	0994	0029	34470	485	2768	14664
168	1185	0008	34471	382	2770	14687
168	1565	0034	34479	500	2769	14763

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0082	31954	808	2563	14488	0000	00000	2365
0010	0082	31981	810	2565	14490	0024	00001	2344
0020	0075	32216	814	2585	14492	0046	00005	2161
0030	0053	32654	812	2621	14490	0066	00010	1815
0050	-0064	33260	785	2675	14447	0098	00022	1300
0075	-0119	33498	745	2696	14429	0128	00041	1097
0100	-0006	33659	737	2705	14488	0155	00065	1018
0125	0042 F	33782	693 C	2712	14516	0179	00093	0949
0150	0048	33875	648	2719	14524	0202	00126	0882
0175	0032 F	33949	644 B	2726	14522	0224	00162	0816
0200	0010	34009	643	2732	14517	0244	00200	0758
0225	0005	34062	613 B	2737	14519	0262	00240	0715
0250	0012	34112	581	2740	14527	0280	00283	0681
0300	0066 B	3423 D	559	2747	14562	0313	00375	0620
0400	0241 C	34424	541	2750	14659	0375	00600	0616
0500	0099	34448	538	2762	14613	0431	00854	0485

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0101	34485	527	2765	14631	0478	01123	0460
0700	0079	34482	518	2766	14638	0524	01429	0447
0800	0064	34478	451	2767	14647	0569	01775	0439
1000	0028	34470	482	2768	14665	0656	02577	0418
1200	0010 B	34469	444 I	2769	14690	0739	03519	0403
1500	0025	34476	486 D	2769	14747	0863	05243	0410

C-REF-NO 020	YR 1964	DEPTH 137	WAVES 1 3634	AIR T 02.4	VIS 3
CONS. NO 080	MONTH 10	MXSAMPD 01	WAVES 2 3235	WET B 01.8	STN
LAT 68-400N	DAY 07	NO.DPTH 8	WND-DIR 360	WW-CODE	
LON 64-510W	HR 05.2	W-COLOR	WND-SPD 15	CLD-TPE X	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 990.5	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
052	0000	0040	31844	806	2557	14467
052	0010	0040	31855	808	2558	14469
052	0020	0038	31838	808	2556	14470
052	0030	0036	31860	805	2558	14471
052	0050	-0134	32719	758	2634	14407
052	0075	-0150	32880	733	2647	14406
052	0100	-0150	33049	715	2661	14412
052	0125	-0149	33043	719	2660	14417

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0040	31844	806	2557	14467	0000	00000	2428
0010	0040	31855	808	2558	14469	0024	00001	2419
0020	0038	31838	808	2556	14470	0049	00005	2431
0030	0036	31860	805	2558	14471	0073	00011	2413
0050	-0134	32719	758	2634	14407	0114	00027	1691
0075	-0150	32880	733	2647	14406	0155	00054	1562
0100	-0150	33049	715	2661	14412	0193	00087	1430
0125	-0149	33043	719	2660	14417	0229	00129	1433

C-REF-NO 020	YR 1964	DEPTH 433	WAVES 1 1833	AIR T 02.3	VIS 6
CONS. NO 081	MONTH 10	MXSAMPD 04	WAVES 2 1833	WET B 01.1	STN
LAT 66-200N	DAY 07	NO.DPTH 12	WND-DIR 180	WW-CODE 70	
LON 60-390W	HR 22.4	W-COLOR	WND-SPD 04	CLD-TPE 6	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 998.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
224	0000	-0002	31805	815	2555	14448
224	0005	-0004	31792	820	2554	14447
224	0020	-0023	31948	821	2568	14443
224	0030	-0106	32577	791	2621	14415
224	0050	-0148	32831	753	2643	14402
224	0075	-0149	33046	731	2661	14409
224	0100	-0149	33157	720	2670	14414
224	0150	-0155	33358	722	2686	14423
224	0200	-0134	33640	693	2708	14445
224	0250	-0110	33820	653	2722	14467
224	0300	-0009	34069	597	2738	14525
224	0425	0049	34260	552	2750	14575

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0002	31805	815	2555	14448	0000	00000	2439
0010	-0002 D	3178 H	825	2553	14449	0025	00001	2462
0020	-0023	31948	821	2568	14443	0049	00005	2321
0030	-0106	32577	791	2621	14415	0070	00010	1810
0050	-0148	32831	753	2643	14402	0104	00024	1602
0075	-0149	33046	731	2661	14409	0142	00048	1435
0100	-0149	33157	720	2670	14414	0177	00080	1348
0125	-0153 B	3325 B	721	2678	14418	0210	00118	1270
0150	-0155	33358	722	2686	14423	0241	00161	1189
0175	-0146	3350 C	710	2697	14433	0270	00209	1081
0200	-0134	33640	693	2708	14445	0296	00258	0976
0225	-0127 C	3373 C	675	2716	14454	0319	00310	0907
0250	-0110	33820	653	2722	14467	0341	00364	0845
0300	-0009	34069	597	2738	14525	0380	00473	0701
0400	0033 I	3423 D	559	2749	14563	0446	00707	0600

C-REF-NO 020	YR 1964	DEPTH 795	WAVES 1 1920	AIR T 00.1	VIS 4
CONS. NO 082	MONTH 10	MXSAMP 08	WAVES 2 2332	WET B -00.5	STN
LAT 66-300N	DAY 08	NO.DPTH 16	WND-DIR 190	WW-CODE 71	
LON 59-000W	HR 02.6	W-COLOR	WND-SPD 07	CLD-TPE 7	
MARSD SQ 222	C/I 1810	W-TRNSP	BARO 999.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
031	0000	0089	31393		2518	14484
031	0010	0090	31387		2517	14486
031	0020	0066	31783		2550	14482
031	0030		31421			
031	0049	-0154	32803		2641	14399
031	0074	-0166	33024		2659	14400
031	0098	-0168	33166		2671	14405
031	0148	-0160	33447		2693	14421
026	0194	-0139	33622		2707	14441
026	0243	-0016	33904		2725	14510
026	0293	0063	34123		2739	14558
026	0392	0207	34425		2753	14642
026	0492	0076	34382		2759	14600
026	0591	0091	33968		2724	14618
026	0691	0077	34476		2766	14635
026	0770	0077	34466		2765	14648

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0089	31393		2518	14484	0000	00000	2796
0010	0090	31387		2517	14486	0028	00001	2801
0020	0066	31783		2550	14482	0055	00005	2486
0030	-0010 I	31421		2525	14444	0081	00012	2729
0050	-0156	3283 D		2643	14398	0125	00029	1601
0075	-0166	33031		2660	14400	0163	00053	1442
0100	-0168	33178		2672	14406	0198	00084	1326
0125	-0166	33325		2684	14413	0230	00121	1213
0150	-0160	33455		2694	14422	0259	00162	1113
0175	-0154 C	3355 B		2702	14430	0286	00208	1041
0200	-0126 C	33656		2709	14449	0311	00256	0967
0225	-0065 F	3380 B		2719	14484	0335	00307	0881
0250	-0003	33938		2727	14518	0356	00359	0804
0300	0078 C	34153		2740	14566	0394	00464	0690
0400	0199 E	34435		2754	14640	0457	00690	0571
0500	0075 B	3434 E		2755	14601	0514	00951	0550
0600	0090	3401 G		2728	14619	0583	01347	0811
0700	0083 D	3428 I		2750	14637	0654	01820	0603

C-REF-NO 020	YR 1964	DEPTH 618	WAVES 1 1922	AIR T 03.5	VIS 8
CONS. NO 083	MONTH 10	MXSAMPD 06	WAVES 2 1522	WET B 01.0	STN
LAT 66-360N	DAY 08	NO.DPTH 14	WND-DIR 150	WW-CODE 01	
LON 57-390W	HR 06.1	W-COLOR	WND-SPD 05	CLD-TPE 8	
MARSD SQ 222	C/I 1810	W-TRNSP	BARO 1000.3	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
061	0000	0039	31667	820	2542	14465
061	0010	0039	31671	820	2543	14466
061	0020	-0054	32109	818	2582	14431
061	0030	-0156	32809	760	2642	14395
061	0050	-0156	33002	735	2657	14401
061	0075	-0168	33143	749	2669	14401
061	0099	-0163	33289	740	2681	14410
061	0149	-0157	33550	719	2702	14424
061	0199	-0062	33827	674	2721	14481
061	0248	0004	34038	664	2735	14522
061	0298	0175	34293	628	2745	14611
061	0398	0140	34397	565	2756	14614
061	0497	0209	34545	571	2762	14662
061	0607	0164	34572	548	2768	14661

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0039	31667	820	2542	14465	0000	00000	2563
0010	0039	31671	820	2543	14466	0026	00001	2559
0020	-0054	32109	818	2582	14431	0050	00005	2186
0030	-0156	32809	760	2642	14395	0069	00010	1618
0050	-0156	33002	735	2657	14401	0100	00022	1469
0075	-0168	33143	749	2669	14401	0135	00045	1355
0100	-0163	33294	740	2681	14410	0168	00074	1239
0125	-0165 D	33427	731	2692	14415	0198	00108	1134
0150	-0155	33556	718	2702	14425	0225	00147	1037
0175	-0111 E	33697	695	2712	14452	0250	00188	0942
0200	-0061	33831	674	2721	14482	0273	00232	0859
0225	-0032 E	3394 B	668	2729	14501	0294	00277	0789
0250	0011 B	34049	663	2735	14526	0313	00324	0728
0300	0176 B	34298	626	2745	14612	0348	00422	0652
0400	0141	34400	565	2756	14615	0408	00637	0550
0500	0172 I	3452 F	554 D	2763	14646	0461	00879	0489
0600	0165 C	34570	548	2768	14660	0508	01146	0448

C-REF-NO 020 YR 1964 DEPTH 506 WAVES 1 2622 AIR T 00.6 VIS 8
 CONS. NO 084 MONTH 10 MXSAMPC 05 WAVES 2 2622 WET B -00.2 STN
 LAT 66-410N DAY 08 NO.DPTH 14 WND-DIR 220 WW-CODE 70
 LON 56-200W HR 09.1 W-COLOR WND-SPD 03 CLD-TPE 6
 MARSD SQ 222 C/I 1810 W-TRNSP BARO 1001.0 CLD-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
091	0000	0291	33099		2640	14596
091	0005	0291	33115		2641	14597
091	0020	0392	33620		2672	14650
091	0030	0392	33671		2676	14652
091	0050	0400	33707		2678	14659
091	0075	0434	33868		2687	14680
091	0100	0543	34164		2698	14733
091	0149	0522	34317		2713	14735
091	0175	0566	34429		2717	14758
091	0199	0497	34391		2722	14734
091	0249	0571	34653		2734	14775
091	0299	0521	34681		2742	14764
091	0395	0558	34316		2709	14790
091	0492	0533	34917		2759	14804

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0291	33099		2640	14596	0000	00000	1636
0010	0323 I	3327 I		2651	14614	0016	00001	1532
0020	0392	33620		2672	14650	0030	00003	1334
0030	0392	33671		2676	14652	0044	00006	1296
0050	0400	33707		2678	14659	0070	00017	1279
0075	0434	33868		2687	14680	0101	00037	1194
0100	0543	34164		2698	14733	0130	00063	1094
0125	0543 I	3427 I		2707	14739	0156	00093	1016
0150	0524	34323		2713	14736	0181	00128	0960
0175	0566	34429		2717	14758	0205	00168	0932
0200	0498 B	34395		2722	14734	0228	00212	0881
0225	0525 I	3451 I		2728	14751	0249	00259	0827
0250	0570	34655		2734	14775	0270	00308	0779
0300	0521	34676		2742	14764	0307	00414	0710
0400	0522 I	3456 I		2732	14779	0384	00693	0813
0500	0535 D	3496 G		2763	14807	0452	01002	0539

C-REF-NO 020	YR 1964	DEPTH 83	WAVES 1 2420	AIR T -00.1	VIS 8
CONS. NO 085	MONTH 10	MXSAMPD 01	WAVES 2 2632	WET B -01.2	STN
LAT 66-480N	DAY 08	NO.DPTH 8	WND-DIR 240	WW-CODE 02	
LON 55-000W	HR 12.3	W-COLOR	WND-SPD 02	CLD-TPE 8	
MARSD SQ 222	C/I 1810	W-TRNSP	BARO 1002.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
123	0000	0312	32837	734	2617	14602
123	0005	0311	32808	733	2615	14602
123	0010	0311	32824	734	2616	14603
123	0020	0307	32995	734	2630	14605
123	0030	0315	33084	731	2637	14611
123	0049	0312	33162	729	2643	14614
123	0074	0303	33261	711	2652	14616
123	0079	0303	33291	708	2654	14617

#TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0312	32837	734	2617	14602	0000	00000	1852
0010	0311	32824	734	2616	14603	0019	00001	1861
0020	0307	32995	734	2630	14605	0037	00004	1729
0030	0315	33084	731	2637	14611	0054	00008	1669
0050	0312	33165	728	2643	14614	0087	00022	1606
0075	0304	33270	711	2652	14617	0126	00047	1521

C-REF-NO 020	YR 1964	DEPTH 832	WAVES 1 2120	AIR T 02.0	VIS 8
CONS. NO 086	MONTH 10	MXSAMPD 08	WAVES 2 2322	WET B 00.9	STN
LAT 64-300N	DAY 08	NO.DPTH 15	WND-DIR 210	WW-CODE 70	
LON 56-580W	HR 23.0	W-COLOR	WND-SPD 02	CLD-TPE 6	
MARSD SQ 222	C/I 1810	W-TRNSP	BARO 1007.5	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
230	0000	0454	33717		2673	14674
230	0005	0455	33719		2673	14675
230	0020	0454	33715		2673	14677
230	0030	0467	33743		2674	14685
230	0050	0463	33711		2672	14686
230	0075	0499	33801		2675	14706
230	0100	0499	33955		2687	14712
230	0150	0499	34561		2735	14729
230	0200	0501	34019		2692	14730
230	0300	0556	34944		2758	14782
230	0400	0535	34953		2762	14790
230	0500	0519	34938		2762	14799
230	0600	0509	34104		2698	14801
230	0700	0497	34942		2765	14824
230	0800	0459	34822		2760	14823

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0454	33717		2673	14674	0000	00000	1321
0010	0454 B	33715		2673	14675	0013	00001	1323
0020	0454	33715		2673	14677	0027	00003	1324
0030	0467	33743		2674	14685	0040	00006	1318
0050	0463	33711		2672	14686	0067	00017	1339
0075	0499	33801		2675	14706	0100	00039	1313
0100	0499	33955		2687	14712	0132	00067	1200
0125	0499	3431 I		2715	14721	0159	00098	0941
0150	0499	34561		2735	14729	0180	00127	0752
0175	0499	3432 I		2716	14729	0201	00163	0935
0200	0501	34019		2692	14730	0228	00215	1166
0225	0515 E	3417 I		2702	14742	0256	00276	1073
0250	0529 F	3437 I		2716	14755	0282	00338	0941
0300	0556	34944		2758	14782	0319	00442	0553
0400	0535	34953		2762	14790	0374	00639	0533
0500	0519	34938		2762	14800	0428	00889	0537
0600	0509	34104		2698	14801	0514	01389	1155
0700	0497	34942		2765	14824	0599	01942	0531
0800	0459	34822		2760	14823	0655	02378	0583

C-REF-NO 020	YR 1964	DEPTH 2286	WAVES 1 2722	AIR T 02.0	VIS 7
CONS. NO 087	MONTH 10	MXSAMPD 22	WAVES 2 1833	WET B 00.6	STN
LAT 62-480N	DAY 09	NO.DPTH 22	WND-DIR 270	WW-CODE 70	
LON 57-000W	HR 06.9	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 222	C/I 1810	W-TRNSP	BARO 1012.5	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
078	0000	0521	34076		2694	14706
078	0010	0521	34088		2695	14708
078	0020	0521	34083		2695	14710
078	0030	0521	34077		2694	14711
078	0050	0521	34072		2694	14715
078	0075	0488	34797		2755	14715
078	0100	0546	34945		2760	14745
078	0150	0518	34933		2762	14741
078	0200	0505	34947		2765	14744
078	0250	0494	34942		2766	14748
069	0298	0478	34931		2767	14749
069	0398	0441	34918		2770	14750
069	0497	0415	34904		2772	14756
069	0596	0400	34904		2773	14766
069	0696	0391	34615		2751	14774
069	0796	0382	34906		2775	14791
069	0895	0380	34916		2776	14807
069	0995	0375	34918		2777	14822
069	1294	0356	34902		2777	14863
069	1593	0348	34941		2781	14911
069	1892	0328	34934		2783	14953
069	2242	0254	34926		2789	14981

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0521	34076		2694	14706	0000	00000	1123
0010	0521	34088		2695	14708	0011	00001	1115
0020	0521	34083		2695	14710	0023	00002	1120
0030	0521	34077		2694	14711	0034	00005	1126
0050	0521	34072		2694	14715	0057	00015	1132
0075	0488	34797		2755	14715	0078	00027	0555
0100	0546	34945		2760	14745	0091	00039	0513
0125	0543 I	3496 F		2762	14748	0104	00054	0500
0150	0518	34933		2762	14741	0117	00072	0496
0175	0510	34940		2764	14742	0129	00092	0486
0200	0505	34947		2765	14744	0141	00116	0477
0225	0500	34946		2765	14746	0153	00142	0474
0250	0494	34942		2766	14748	0165	00171	0474

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	0477	34931		2767	14749	0189	00238	0469
0400	0440	34918		2770	14750	0235	00405	0448
0500	0414	34906		2772	14756	0280	00611	0438
0600	0400	3489 B		2772	14766	0324	00863	0443
0700	0391	3462 B		2752	14775	0379	01234	0639
0800	0382	34909		2775	14792	0433	01645	0427
1000	0375	34918		2777	14822	0520	02449	0430
1200	0362	34906		2777	14850	0608	03449	0440
1500	0351	34928		2780	14896	0741	05300	0434
2000	0306 C	3494 B		2785	14962	0954	09126	0404

C-REF-NO 020	YR 1964	DEPTH	357	WAVES 1 2720	AIR T -02.1	VIS 7
CONS. NO 088	MONTH 10	MXSAMPD	03	WAVES 2 XX	WET B -03.1	STN
LAT 62-000N	DAY 10	NO.DPTH	11	WND-DIR 290	WW-CODE 85	
LON 64-000W	HR 03.0	W-COLOR		WND-SPD 04	CLD-TPE 6	
MARSD SQ 223	C/I 1810	W-TRNSP		BARO 1011.2	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
030	0000	0079	31511		2528	14481
030	0010	0081	32055		2571	14491
030	0020	0079	32058		2572	14491
030	0030	0080	31687		2542	14488
030	0050	-0066	32832		2641	14441
030	0075	-0150	33032		2660	14408
030	0100	-0071	33257		2675	14452
030	0150	-0146	33456		2694	14428
030	0200	-0038	33805		2718	14492
030	0250	0199	34279		2742	14613
030	0300	0238	34358		2745	14640

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0079	31511		2528	14481	0000	00000	2701
0010	0081	32055		2571	14491	0025	00001	2287
0020	0079	32058		2572	14491	0048	00005	2283
0030	0080	31687		2542	14488	0072	00011	2567
0050	-0066	32832		2641	14441	0115	00027	1626
0075	-0150	33032		2660	14408	0153	00052	1445
0100	-0071	33257		2675	14452	0188	00083	1297
0125	-0101 I	3337 G		2685	14444	0219	00119	1200
0150	-0146	33456		2694	14428	0249	00160	1116
0175	-0112 B	33613		2705	14451	0275	00204	1006
0200	-0038	33805		2718	14492	0299	00250	0889
0225	0085 I	3406 G		2732	14556	0320	00295	0765
0250	0199	34279		2742	14613	0338	00340	0682
0300	0238	34358		2745	14640	0372	00435	0657

C-REF-NO 020	YR 1964	DEPTH 441	WAVES 1 0420	AIR T 05.3	VIS 8
CONS. NO 089	MONTH 10	MXSAMPD 04	WAVES 2 X2	WET B 03.5	STN
LAT 60-310N	DAY 10	NO.DPTH 12	WND-DIR 040	WW-CODE 70	
LON 63-020W	HR 10.2	W-COLOR	WND-SPD 01	CLD-TPE 6	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1014.2	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
102	0000	0019	32708		2627	14470
102	0010	0023	32711		2627	14473
102	0020	0027	31164		2503	14455
102	0030	0026	32721		2628	14478
102	0050	0008	32182		2585	14466
102	0075	0012	32623		2621	14478
102	0099	0002	33117		2661	14484
102	0149	0021	33415		2684	14505
102	0199	0073	33396		2680	14537
102	0249	0252	34346		2743	14637
102	0294	0359	34655		2758	14695
102	0422	0384	34688		2758	14727

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0019	32708		2627	14470	0000	00000	1758
0010	0023	32711		2627	14473	0018	00001	1758
0020	0027	31164		2503	14455	0041	00005	2941
0030	0026	32721		2628	14478	0065	00011	1751
0050	0008	32182		2585	14466	0104	00027	2153
0075	0012	32623		2621	14478	0154	00059	1817
0100	0002	33129		2662	14484	0195	00095	1426
0125	0006	3335 I		2680	14494	0229	00133	1257
0150	0021	3341 B		2684	14505	0260	00177	1220
0175	0038 D	3336 I		2679	14516	0291	00230	1264
0200	0076	3341 B		2681	14539	0323	00291	1249
0225	0162 H	3387 I		2712	14587	0351	00351	0962
0250	0255	34357		2743	14639	0371	00401	0670
0300	0369	3481 I		2769	14703	0400	00478	0442
0400	0409	3486 I		2769	14736	0445	00642	0457

C-REF-NO 020	YR 1964	DEPTH 2743	WAVES 1 2820	AIR T 03.7	VIS 8
CONS. NO 090	MONTH 10	MXSAMPD 27	WAVES 2 2833	WET B 02.7	STN
LAT 59-420N	DAY 20	NO.DPTH 23	WND-DIR 280	WW-CODE 02	
LON 58-000W	HR 18.0	W-COLOR	WND-SPD 03	CLD-TPE 6	
MARSD SQ 186	C/I 1810	W-TRNSP	BARO 999.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	0468	34257		2714	14687
190	0005	0469	34265		2715	14688
190	0020	0470	34269		2715	14691
190	0030	0485	34318		2717	14700
190	0050	0506	34383		2720	14713
190	0075	0538	34570		2731	14732
190	0100	0546	34931		2759	14745
190	0150	0535	34961		2762	14749
190	0200	0513	34949		2764	14748
190	0300	0471	34929		2767	14747
190	0400	0433	34925		2771	14747
180	0496	0430	34904		2770	14762
180	0596	0388	34895		2774	14760
180	0696	0382	34916		2776	14775
180	0796	0373	34908		2776	14788
180	0895	0371	34907		2776	14803
180	0995	0364	34912		2777	14817
180	1292	0353	34913		2779	14862
180	1592	0350	35026		2788	14913
180	1892	0333	34941		2783	14955
180	2192	0303	34960		2787	14994
180	2492	0271	34943		2789	15031
180	2692	0224	34930		2792	15045

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0468	34257		2714	14687	0000	00000	0930
0010	0468 B	3426 B		2715	14689	0009	00000	0926
0020	0470	34269		2715	14691	0019	00002	0925
0030	0485	34318		2717	14700	0028	00004	0905
0050	0506	34383		2720	14713	0046	00012	0882
0075	0538	34570		2731	14732	0067	00025	0781
0100	0546	34931		2759	14745	0083	00039	0524
0125	0543	3501 I		2765	14749	0096	00054	0468
0150	0535	34961		2762	14749	0108	00071	0495
0175	0525	34958		2763	14749	0120	00092	0489
0200	0513	34949		2764	14748	0133	00115	0485
0225	0502	34943		2765	14747	0145	00142	0480
0250	0492	34938		2766	14747	0157	00171	0474

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	0471	34929		2767	14747	0181	00238	0463
0400	0433	34925		2771	14747	0226	00400	0434
0500	0428	34903		2770	14762	0271	00609	0455
0600	0387	34896		2774	14761	0315	00860	0425
0700	0382	34916		2776	14775	0357	01142	0412
0800	0373	34908		2776	14788	0399	01467	0417
1000	0364	34912		2777	14818	0484	02254	0421
1200	0355	3491 B		2778	14848	0571	03234	0431
1500	0351	3500 D		2785	14897	0695	04952	0386
2000	0323	3494 B		2784	14970	0901	08699	0425
2500	0264 D	34947		2790	15030	1105	13395	0374

C-REF-NO 020	YR 1964	DEPTH 3292	WAVES 1 2521	AIR T 04.8	VIS 8
CONS. NO 091	MONTH 10	MXSAMPD 27	WAVES 2 2533	WET B 02.0	STN
LAT 59-000N	DAY 21	NO.DPTH 23	WND-DIR 250	WW-CODE 02	
LON 55-000W	HR 02.9	W-COLOR	WND-SPD 12	CLD-TPE 6	
MARSD SQ 186	C/I 1810	W-TRNSP	BARO 1011.2	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
042	0000	0534	34571		2732	14718
042	0010	0535	34576		2732	14721
042	0020	0546	34693		2740	14728
042	0030	0559	34817		2748	14737
042	0050	0571	34927		2755	14746
042	0074	0546	34779		2747	14738
042	0099	0567	34951		2758	14753
042	0149	0571	34976		2759	14763
042	0198	0567	34992		2761	14770
042	0297	0533	34968		2763	14772
042	0396	0485	34946		2767	14768
029	0451	0415	34898		2771	14748
042	0495	0424	34903		2771	14759
029	0545	0371	34858		2772	14744
029	0639	0368	34875		2774	14759
029	0730	0369	34874		2774	14774
029	0823	0367	34877		2774	14789
029	1108	0357	34892		2777	14833
029	1399	0348	34896		2778	14878
029	1721	0346	34900		2778	14931
029	2045	0354	34952		2782	14990
029	2342	0331	34948		2784	15031
029	2721	0290	34951		2788	15079

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0534	34571		2732	14718	0000	00000	0767
0010	0535	34576		2732	14721	0008	00000	0765
0020	0546	34693		2740	14728	0015	00002	0691
0030	0559	34817		2748	14737	0022	00003	0615
0050	0571	34927		2755	14746	0033	00008	0550
0075	0547	34784		2747	14739	0048	00018	0631
0100	0567	34954		2758	14754	0063	00031	0532
0125	0573 B	3499 F		2760	14760	0076	00046	0514
0150	0571	34976		2759	14764	0089	00064	0527
0175	0570	34986		2760	14767	0102	00087	0522
0200	0567	34992		2761	14770	0116	00112	0517
0225	0560	34989		2762	14772	0129	00140	0514

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
*0250	0552	34984		2762	14772	0142	00172	0512
0300	0532	34968		2763	14772	0167	00244	0506
0400	0479 B	34942		2767	14767	0217	00422	0474
0500	0419 B	34899		2771	14758	0263	00637	0448
0600	0361 E	3486 B		2774	14749	0307	00885	0422
0700	0369	34875		2774	14769	0350	01172	0428
0800	0368	34876		2774	14786	0394	01510	0435
1000	0361	34886		2776	14816	0482	02328	0437
1200	0354	34894		2777	14847	0571	03334	0439
1500	0346	34895		2778	14894	0707	05229	0454
2000	0354	34945		2781	14982	0941	09457	0466
2500	0320 B	3496 B		2786	15054	1172	14832	0445

C-REF-NO 020	YR 1964	DEPTH 246	WAVES 1 2421	AIR T 03.5	VIS 8
CONS. NO 092	MONTH 10	MXSAMPD 02	WAVES 2 2434	WET B 01.4	STN
LAT 58-000N	DAY 21	NO.DPTH 9	WND-DIR 240	WW-CODE 03	
LON 60-000W	HR 16.6	W-COLOR	WND-SPD 12	CLD-TPE 0	
MARSD SQ 187	C/I 1810	W-TRNSP	BARO 1023.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
166	0000	0021	32734		2629	14471
166	0010	0021	32732		2629	14473
166	0020	0020	32742		2630	14474
166	0030	0028	32801		2634	14480
166	0050	0048	32923		2643	14494
166	0075	0076	33059		2652	14513
166	0100	0069	33175		2662	14516
166	0150	0036	33457		2686	14513
166	0199	0203	34099		2727	14604

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0021	32734		2629	14471	0000	00000	1739
0010	0021	32732		2629	14473	0018	00001	1741
0020	0020	32742		2630	14474	0035	00004	1732
0030	0028	32801		2634	14480	0052	00008	1691
0050	0048	32923		2643	14494	0085	00022	1607
0075	0076	33059		2652	14513	0125	00047	1519
0100	0069	33175		2662	14516	0162	00080	1426
0125	0041 I	3329 D		2673	14509	0197	00120	1324
0150	0036	33457		2686	14513	0228	00164	1193
0175	0124 I	3378 G		2707	14561	0256	00210	1004
0200	0207	34114		2728	14606	0279	00254	0811

C-REF-NO 020	YR 1964	DEPTH 2341	WAVES 1 1320	AIR T 03.2	VIS 7
CONS. NO 093	MONTH 10	MXSAMPD 23	WAVES 2 2432	WET B 01.8	STN
LAT 57-000N	DAY 22	NO.DPTH 22	WND-DIR 130	WW-CODE 70	
LON 57-000W	HR 00.6	W-COLOR	WND-SPD 05	CLD-TPE 4	
MARSD SQ 186	C/I 1810	W-TRNSP	BARO 1027.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
015	0000	0499	34295		2714	14700
015	0005	0499	34299		2714	14701
015	0020	0503	34308		2715	14705
015	0030	0509	34364		2718	14710
015	0049	0513	34372		2718	14715
015	0074	0530	34478		2725	14728
015	0098	0510	34834		2755	14728
015	0148	0523	34940		2762	14743
015	0197	0448	34878		2766	14719
015	0296	0519	34907		2760	14765
006	0398	0383	34875		2773	14725
006	0498	0383	34890		2774	14742
006	0597	0373	34890		2775	14754
006	0696	0371	35164		2797	14774
006	0795	0365	34899		2776	14784
006	0894	0360	34924		2779	14799
006	0993	0356	34904		2778	14813
006	1291	0346	34905		2779	14859
006	1589	0343	34940		2782	14908
006	1887	0313	34947		2785	14946
006	2185	0270	34939		2789	14978
006	2284	0259	34963		2791	14991

#TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0499	34295		2714	14700	0000	00000	0934
0010	0500	3430 B		2714	14702	0009	00000	0935
0020	0503	34308		2715	14705	0019	00002	0931
0030	0509	34364		2718	14710	0028	00004	0897
0050	0514	34373		2718	14716	0046	00012	0899
0075	0529	34492		2726	14728	0068	00026	0829
0100	0511	3485 B		2756	14729	0085	00041	0545
0125	0518 G	3496 I		2764	14738	0098	00055	0476
0150	0520	34939		2762	14742	0110	00073	0494
0175	0483 G	3491 C		2765	14731	0123	00093	0474
0200	0449 C	34878		2766	14721	0134	00116	0466
0225	0463 I	3488 C		2764	14730	0146	00142	0483
*0250	0480 I	3488 D		2763	14742	0159	00173	0501

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	0514 B	34906		2761	14764	0185	00246	0531
0400	0382	34875		2773	14725	0233	00415	0416
0500	0383	34889		2774	14742	0275	00610	0415
0600	0373	3490 B		2776	14755	0316	00844	0405
0700	0371	3516 B		2796	14774	0348	01052	0222
0800	0365	34897		2776	14785	0380	01306	0416
1000	0356	34903		2778	14814	0465	02089	0418
1200	0349	34898		2778	14845	0550	03064	0430
1500	0345	34929		2781	14894	0681	04877	0427
2000	0297	3494 B		2786	14958	0889	08621	0394

C-REF-NO 020	YR 1964	DEPTH 246	WAVES 1 1420	AIR T 04.0	VIS 0
CONS. NO 094	MONTH 10	MXSAMPD 02	WAVES 2 1432	WET B 03.9	STN
LAT 55-000N	DAY 22	NO.DPTH 9	WND-DIR 140	WW-CODE 49	
LON 57-000W	HR 10.0	W-COLOR	WND-SPD 15	CLD-TPE X	
MARSD SQ 186	C/I 1810	W-TRNSP	BARO 1002.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
100	0000	0103	32353		2594	14503
100	0005	0103	32348		2594	14504
100	0019	0101	32337		2593	14505
100	0029	0099	32388		2597	14507
100	0048	0054	32984		2648	14498
100	0072	0071	33116		2657	14511
100	0097	0093	33211		2663	14526
100	0145	0129	33429		2679	14553
100	0193	0098	33567		2692	14549

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0103	32353		2594	14503	0000	00000	2072
0010	0103	3234 B		2593	14504	0021	00001	2083
0020	0101	32337		2593	14505	0042	00004	2083
0030	0097	3242 C		2600	14506	0063	00010	2020
0050	0054	3301 C		2650	14498	0098	00024	1545
0075	0074	33128		2658	14513	0136	00048	1465
0100	0096	33225		2664	14529	0172	00080	1404
0125	0119 C	3334 B		2672	14544	0207	00120	1331
0150	0120 F	3343 D		2679	14550	0240	00166	1265
0175	0111 C	3351 B		2686	14552	0271	00218	1197

C-REF-NO 020	YR 1964	DEPTH 174	WAVES 1 1820	AIR T 07.6	VIS 8
CONS. NO 095	MONTH 10	MXSAMPD 02	WAVES 2 1822	WET B 05.9	STN
LAT 53-00 N	DAY 22	NO.DPTH 9	WND-DIR 190	WW-CODE 02	
LON 55-00 W	HR 22.1	W-COLOR	WND-SPD 09	CLD-TPE 4	
MARSD SQ 186	C/I 1810	W-TRNSP	BARO 1011.2	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
221	0000	0309	31430		2506	14582					
221	0010	0284	31912		2546	14579					
221	0020	0246	32441		2591	14571					
221	0030	0218	32538		2601	14562					
221	0050	0060	32831		2635	14498					
221	0075	0030	33099		2658	14493					
221	0100	-0078	33231		2673	14449					
221	0149	-0065	33366		2684	14465					
221	0169	-0049	33492		2693	14477					

*TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0309	31430		2506	14582	0000	00000	2913
0010	0284	31912		2546	14579	0027	00001	2529
0020	0246	32441		2591	14571	0051	00005	2100
0030	0218	32538		2601	14562	0071	00010	2006
0050	0060	32831		2635	14498	0108	00025	1684
0075	0030	33099		2658	14493	0148	00050	1463
0100	-0078	33231		2673	14449	0183	00081	1314
0125	-0092 I	3330 F		2679	14447	0215	00119	1259
0150	-0085 I	3340 G		2688	14456	0246	00162	1177



DATA RECORD
SAGUENAY AND GULF OF ST. LAWRENCE

August 19 to August 30, 1963

No. 12

1965 Data Record Series

(Canadian) Oceanographic Data Centre

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1965

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CODC Reference: 13-63-003

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Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography

DEPARTMENT OF MINES AND TECHNICAL SURVEYS
MARINE SCIENCES BRANCH

SAGUENAY RIVER and GULF OF ST. LAWRENCE

Ship:	CSS "Cartier"
Local cruise designation:	CA 1-63
Cruise period:	August 19 to August 30, 1963
Observers:	See Introduction Part 1

CANADIAN HYDROGRAPHIC SERVICE
DIVISION OF OCEANOGRAPHIC RESEARCH

SECTION I

Description of data collection procedures

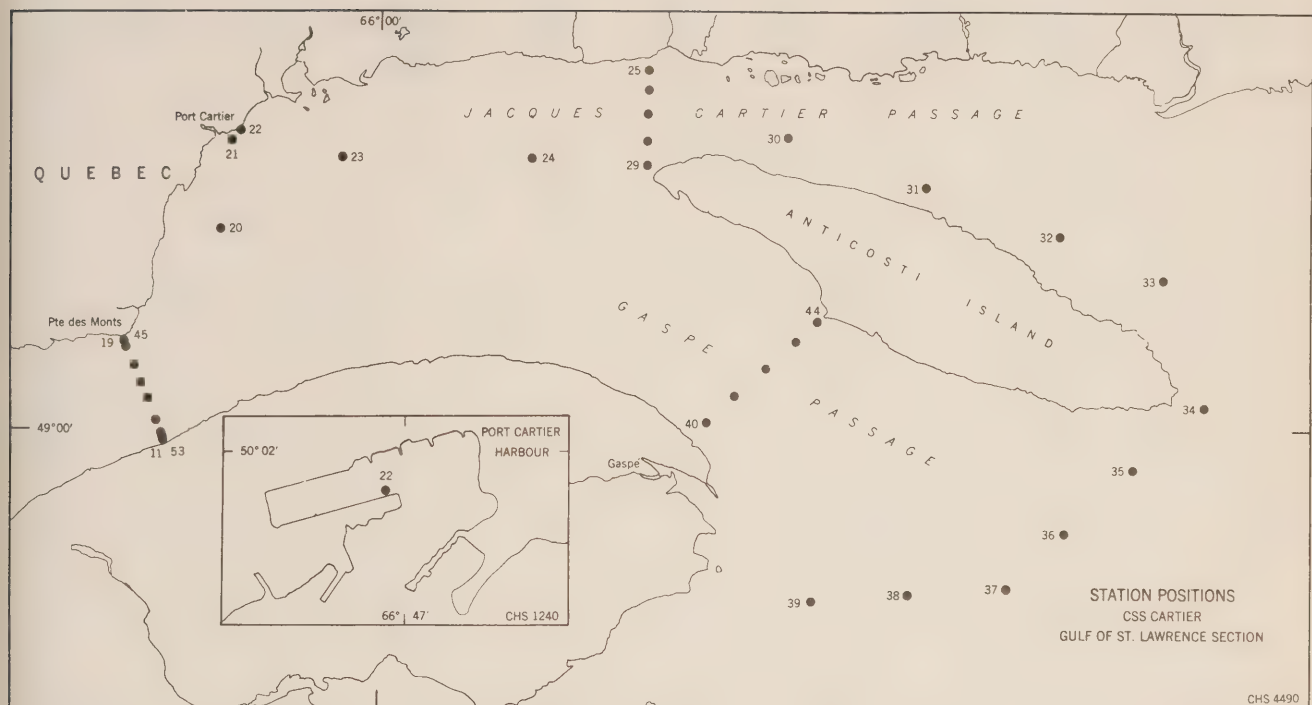


FIGURE 1

Approximate positions of stations occupied by CSS "Cartier" in the Saguenay River and the lower St. Lawrence.

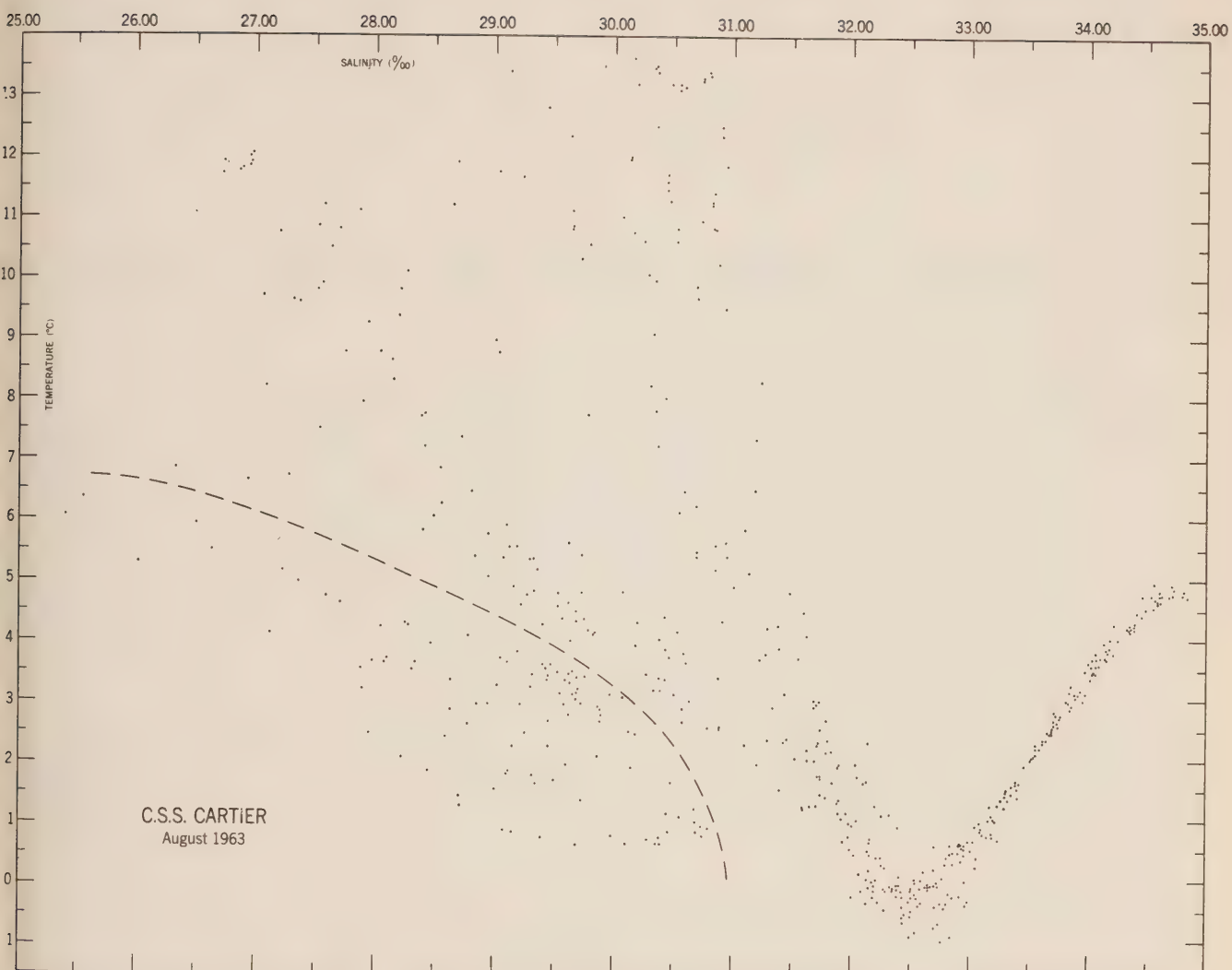


Figure 2

Temperature - salinity relation of those data above 25‰. Those to the left and below the dashed line were observed in the Saguenay River.

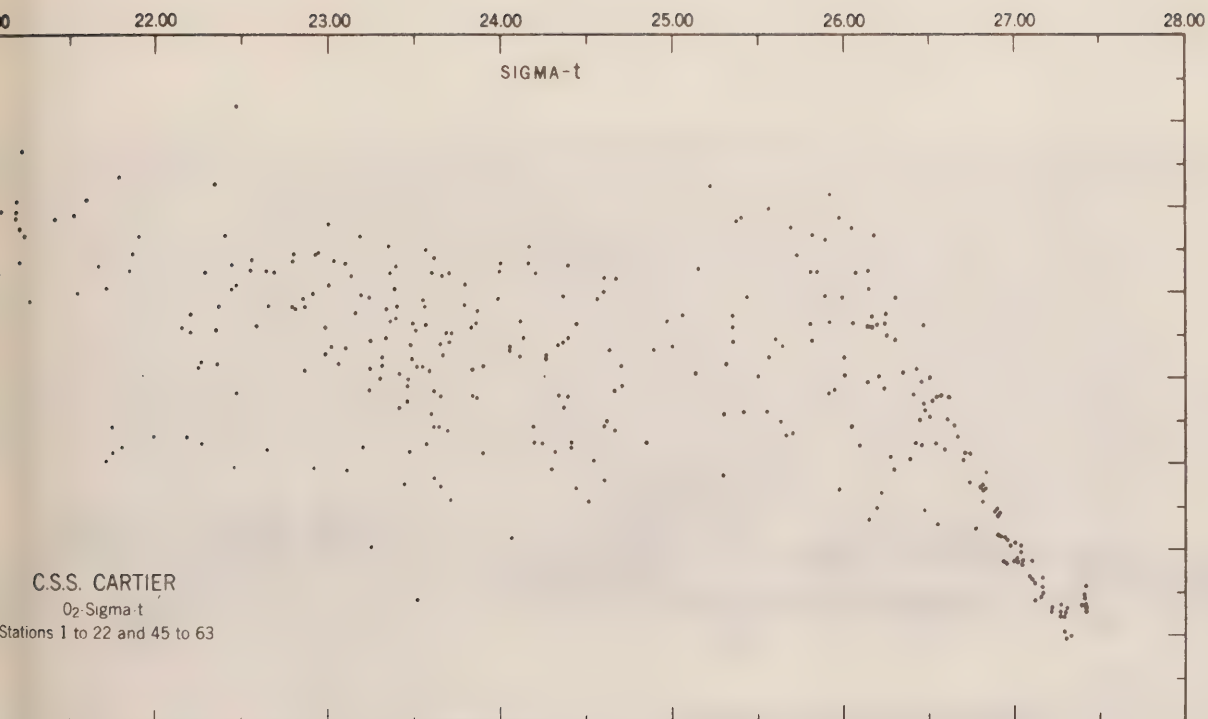


FIGURE 3

Dissolved oxygen - sigma-t relation of all the data.

"CART



Canadian Hydrographic Survey

INTRODUCTION

The oceanographic data contained in this report were observed in August 1963 on a survey in the area of the lower St. Lawrence River (Fig. 1) in the Department of Mines and Technical Surveys vessel CSS "Cartier" (see frontispiece). The purpose of the survey was to provide training to junior personnel in routine oceanographic field work. Station locations were determined by the staff of the Atlantic Oceanographic Group who are currently engaged in study of the region. The vessel was made available for the survey at Quebec; subsequent movements are indicated in the section titled "Extract of cruise log". All equipment was provided by the Bedford Institute of Oceanography. Personnel included F. Barber, M. Bolton, C. Glennie, B. Kelly, B. Peel, C. Pellerin, R. Snodgrass, S. van Dyck, and R. Wallis. The serial observations were prepared for this report by B. Kelly.

The presentation of data in this report is subject to modification and possible correction at a later date. The original records are on file with the Marine Sciences Branch, Ottawa.

EXTRACT OF CRUISE LOG

August 18	Depart Quebec en route Saguenay River.
August 19	Occupy test station and station 1.
August 20	Occupy stations 2-10.
August 21	Occupy stations 11-15.
August 22	Alongside in Port Cartier where one station occupied. Occupy stations 16-22.
August 23	Occupy stations 23-29.
August 24	Occupy stations 30-36.
August 25	Alongside in Gaspé. Occupy stations 36-39.
August 26	Occupy stations 40-43.
August 27	Occupy stations 44-47.
August 28	Occupy stations 48-45.
August 29	Anchored in Saguenay River. Occupy stations 56-64.
August 30	Arrive Quebec.

FACILITIES

A wet laboratory was provided by screening off a small area of the starboard upper deck passageway with a temporary wooden structure, and by the installation of a work bench with a sink. Bottle racks were located and dissolved oxygen determinations were carried out there. Data reduction was carried out in the hydrographic chart room. Serial casts, BT lowerings, and plankton and grab sampling were carried out using an existing winch (Kelvin Major) which had been re-located to a position at the starboard waist. A new length of 3/32 inch diameter galvanized aircraft cord was wound on at the beginning and served throughout. Sampling with the gravity corer and the anchoring at station 64 was carried out using a head of the anchor windlass as a reel on which 2000 feet of 1/8 inch 3 x 19 galvanized rope was wound.

STATION PROCEDURES

Serial data were obtained at standard depths and 125 and 175m using a variety of reversing bottles and thermometers. Generally the deeper cast was made first with six bottles followed with a BT lowering, a vertical plankton haul, a Secchi disk observation, bottom grab, the shallow cast, and a corer lowering. The "soak" time for each bottle cast was 10 minutes. Samples at the surface for temperature, salinity, and dissolved oxygen were obtained using an insulated bucket fitted with a thermometer. At certain stations samples were drawn for the immediate determinations of dissolved oxygen and at all stations for the later determination of salinity. The latter were stored in glass bottles with patent stoppers fitted with rubber washers. At the anchor station (station 64) surface temperatures were read and bathythermograms obtained hourly. The extent of the data obtained is indicated in Table 1, and the approximate station positions in Figure 1.

LABORATORY PROCEDURES

The depths of reversal tabulated here were obtained using the nominal depth and wire angle data. The tabulated temperatures at depth were obtained from the average of two readings of one of the protected thermometers on each bottle. The salinity determinations were carried out at the Bedford Institute of Oceanography using a conductivity meter with an extended range bridge and chemical titration for the few samples below about 15‰. Dissolved oxygen determinations were made using a procedure described by Strickland and Parsons (1960). The data were scrutinized carefully before release for reporting as it was known from the field experience that sampling errors had occurred. These were caused by inexperience, reversing bottle leakages, and by bottles occasionally slipping down the narrow gauge rope used for the casts. All the tabulated temperature and salinity data greater than 25‰ is shown in the T-S diagram of Figure 2 and in Figure 3 are presented the oxygen-sigma-t relationship for those stations at which dissolved oxygen determinations were carried out. It is possible that

the proper technique of dissolved oxygen determination was not rigorously followed during the early part of the training cruise so that the tabulated values should be treated accordingly. The grab and corer samples were forwarded to the Bedford Institute of Oceanography and the plankton samples to the Arctic Biological Station.

BATHYTHERMOGRAPH DATA

The bathythermograph data were transposed to aperture cards (Sauer, 1964; 1965) by the BT processing section of CODC.

The bathythermograms appearing in this Data Record were reproduced from the above BT-aperture cards. The system is fast and efficient. Moreover it eliminates unnecessary bias that could be introduced when hand-drawing the BT traces.

To optimize this system and obtain a clear image, it is imperative that observers and data centre personnel handle the slides with more care. The "Cartier" cruise BT slides arrived here badly scratched, smudged and finger printed; hence their reproduction in this Data Record is not indicative of the optimum capability of this technique.

The number which appears directly below each bathythermogram represents the consecutive slide number; it relates the bathythermograms to their associated environmental information (see Table 2 p. 111).

TABLE 1 - A listing of station number, type of data
observed, and BT slide number.

STN	TEMP	SAL	O ₂	GRAB	CORE	PLANKTON	SECCHI	SLIDE
TEST	X	X	X				X	1
1	X	X	X	X	X	X	X	2 & 3
2	X	X	X	X	X	X		4
3	X	X	X	X	X	X		5
4	X	X	X	X	X	X	X	6
5	X	X	X	X	X	X	X	7
6	X	X	X	X		X	X	8
7	X	X	X	X		X	X	9
8			X	X		X	X	10
9	X	X	X	X	X	X	X	11
10	X	X	X	X	X	X	X	12
11	X	X	X	X	X	X	X	13
12	X	X	X	X		X	X	14
13	X	X	X	X	X	X	X	15
14	X	X	X	X	X	X	X	16
15	X	X	X	X	X	X	X	17
16	X	X	X	X	X	X	X	18
17	X	X	X	X	X	X	X	19
18	X	X	X		X	X	X	20
19	X	X	X	X		X	X	21
20	X	X	X	X	X	X	X	22
21	X	X	X	X		X	X	23
22	X	X	X			X	X	24
23	X	X		X	X	X	X	25
23								25A *
24	X	X		X		X	X	26
25	X	X		X		X	X	27
26	X	X		X			X	28
27	X	X		X		X	X	29 *
28	X	X		X		X	X	30
29	X	X		X		X	X	31
30	X	X		X		X	X	32
31	X	X		X		X	X	33 *
32	X	X		X	X	X		34
33	X	X		X	X	X	X	35 *
34	X	X		X		X	X	36
35	X	X		X		X	X	37
36	X	X		X	X	X	X	38
37	X	X		X		X		39
38	X	X		X	X	X	X	40
39	X	X				X	X	41
40	X	X		X	X	X	X	42

TABLE 1 (Continued)

STN	TEMP	SAL	O ₂	GRAB	CORE	PLANKTON	SECCHI	SLIDE
41	X	X		X	X	X	X	43
42	X	X		X	X	X	X	44
43	X	X		X		X	X	45
44	X	X		X		X	X	46
45	X	X	X			X	X	47
46	X	X	X	X	X	X	X	48
47	X	X	X			X	X	49
48	X	X	X			X	X	50
49	X	X	X			X	X	51
50	X	X	X					52
51	X	X	X					53
52	X	X	X		X			54
53	X	X	X				X	55
54	X	X	X		X		X	56
55	X	X	X				X	57
56	X	X	X				X	58
57	X	X	X				X	59
58	X	X	X	X	X			60
59	X	X	X					61
60	X	X	X				X	62
61	X	X	X				X	63
62	X	X	X				X	64
63	X	X	X				X	65
64	1715 - 29	GMT						66
64	1730							67
64	1830							68
64	1930							69
64	2030							70
64	2130							71
64	2230							72
64	2330							73
64	0015 - 30							74 **
64	0020							75 **
64	0030							76
64	0045							77
64	0055							78
64	0130							79 *
64	0230							80
64	0330							81

* not reproduced

** slides 74 and 75 were calibration slides and are not shown

SECTION II

Description of the machine-generated data record

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an "estimate of precision" for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** (σ) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under "GENERAL INFORMATION" in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an "**interpolation error estimate**" derived from the particular interpolation formula used. There are two purposes in stating the error estimates; **first**, to give an indication of the quality of the interpolated data; **second**, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T, S, O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the "**measurement error estimate**" comprises the "**combined measurement and interpolation error estimate**". It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

1 IDENT. CODE		2 LATITUDE (N=+)		3 LONGITUDE (W=+)		5 DATE		6 TIME		7 DEPTH		9 NO.		VESSEL	
COUNTRY INST.		DEG. ° MIN. 1/10		DEG. ° MIN. 1/10		YEAR MONTH DAY		HOURS G.M.T. 1/10		TO BOTTOM		DEPTHS OBS'D.		ENTERED BY	
1 8						19 20 21 22 23 24 25 26 27 28 29 30 31						34 35		CHECKED BY	
10 WATER		11 WAVES I		12 WAVES II		13 WIND		14 BAROMETER		15 AIR TEMP.		16 WET BULB		17 W.W. CODE	
COLOUR TRANS.		Dw Dw PwHw		Dw Dw Pw Hw		DIR. DIR.				1/10		1/10		(SEPT. 62)	
36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80					

OBSERVED		C A R D		* COLUMN 1-24 ARE ON WATER		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20		6 TIME		7 DEPTH OF SAMPLE		8 TEMPERATURE		9 SALINITY		10 OXYGEN		13 PO ₄ - P		14 TOTAL - P		15 NO ₂ - N		16 NO ₃ - N		17 SiO ₂ - Si		18 P.H.		CAMERA	
HOURS G.M.T. 1/10		e		e		e		e		e		e		e		e		e		e		e		e		e		e		e	
1																														3	
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80																														3	

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ = Standard deviation of the combined error estimates at standard oceanographic depth,
 ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $1/3 (\bar{V}_{i_1} - V_{i_2})$
 γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) WW-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

(1) CRUISE REFER-
ENCE NUMBER:

Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.

(2) CONSECUTIVE
NUMBER:

Indicates the chronological order in which the stations were occupied.

(3) LATITUDE:

Indicate the position of the platform at the time of observation.

(4) LONGITUDE:

(5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).

(6) YEAR:

(7) MONTH:

(8) DAY:

(9) HOUR:

The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.

(10) COUNTRY/
INSTITUTE:

The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.

(11) DEPTH:

The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".

(12) MAXIMUM

SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).

00 m - 50 m = 00

51 m - 150 m = 01

151 m - 250 m = 02

etc.

(13) NUMBER OF

DEPTHS:

The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).

(14) WATER COLOUR:

The Forel-Ule Code (see table 2 and NOTE under FIELD "15" below).

(15) WATER

TRANSPARENCY:

The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;

NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.

(16) WAVES 1

($d_w d_w P_w H_w$ -code):

The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.

(17) WAVES 2

($d_w d_w P_w H_w$ -code):

The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.

(18) WIND DIRECTION:

The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).

(19) WIND FORCE

(WND-FCE):

Beaufort notation (See Table 6).

WIND SPEED

(WND-SPD):

Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.

(20) BAROMETER:

The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.

(21) AIR

TEMPERATURE:

In degrees Celsius.

(22) WET BULB:

In degrees Celsius.

(23) ww CODE:

Present Weather Code (See Table 7). Ref: WMO Code 4677

(24) CLOUD TYPE:

The type of predominating clouds (See Table 8). Ref: WMO Code 0500.

(25) CLOUD AMOUNT:

The sky coverage in eighths (See Table 9) Ref: WMO Code 2700

(26) VISIBILITY:

Visibility at the surface (See Table 10). Ref: WMO Code 4300.

(27) STATION:

A station reference number, assigned by the institute prior to, or during the survey.

(28) HOURS AFTER

HIGH WATER:

Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO_4	(9) -P-	(10) NO_2	(11) NO_3	(12) SiO_2
				(13) pH.	

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 C1\%$, reported in:
 a. 1/100 parts per 1000, or
 b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places. An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

- (8) PO_4 Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
- (9) -P- Total Phosphorus reported to hundredths of microgram-atoms per litre.
- (10) NO_2 Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
- (11) NO_3 Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
- (12) SiO_2 Silicate-Silicon reported in whole microgram-atoms per litre.
- (13) pH The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

(1) <i>DEPTH</i>	(2) <i>TEMP</i>	(3) <i>SAL</i>	(4) <i>OXYGEN</i>	(5) <i>SGMT</i>	(6) <i>SOUND</i>
(7) <i>DELTA-D</i>	(8) <i>POT-EN</i>	(9) <i>SVA.</i>			

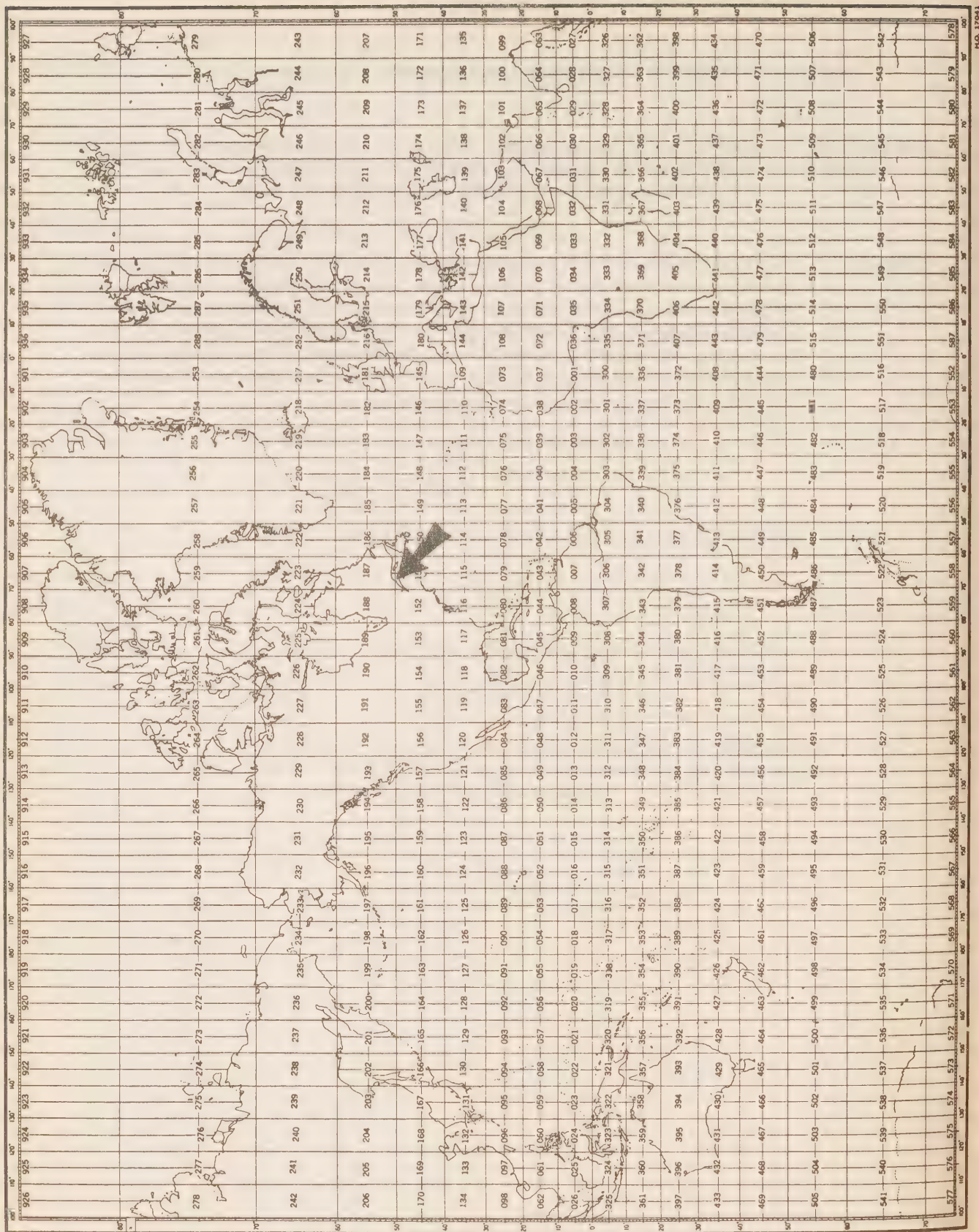
- (1) **DEPTH:** Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) **TEMPERATURE:** Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "INTRODUCTION" to section II of the data record).
- (3) **SALINITY:**
- A. The reported salinity values are measured to three decimal places.
 - (i) the interpolation error estimate is less than twice the standard deviation of measurement
 - the interpolated value is reported to three decimal places (e.g., 30.139).
 - (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 - the interpolated value is reported to two decimal places, and followed by the interpolation error estimate (e.g., 29.23 C).
 - B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 - the interpolated value is reported to two decimal places, and followed by the combined measurement and interpolation error estimate (e.g., 30.59 B).
- (4) **OXYGEN:** Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "Introduction" to section II of the data record).

- (5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.
- (6) SOUND
VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).
- (7) DELTA-D: The geo-potential anomaly as defined by:
- $$\Delta D = \int_0^P \delta dp$$
- ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).
- (8) POTENTIAL
ENERGY
ANOMALY: The Potential energy anomaly χ as defined by:
- $$\chi = 1/g \int_0^P p \delta dp = \int_0^z \rho p \delta dz$$
- χ is expressed in units of 10^8 ergs/cm² and recorded to two decimal places (e.g., 116.44).
- (9) SPECIFIC
VOLUME
ANOMALY: The specific volume anomaly as defined by:
- $$\delta = \alpha - \alpha_{35.0.P}$$
- δ is expressed in ml/gr, and conventionally reported as $10^5 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs

* (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval**. The **third**, and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two interpolations between the last two observed depths.



MARS DEN SQUARE CHART

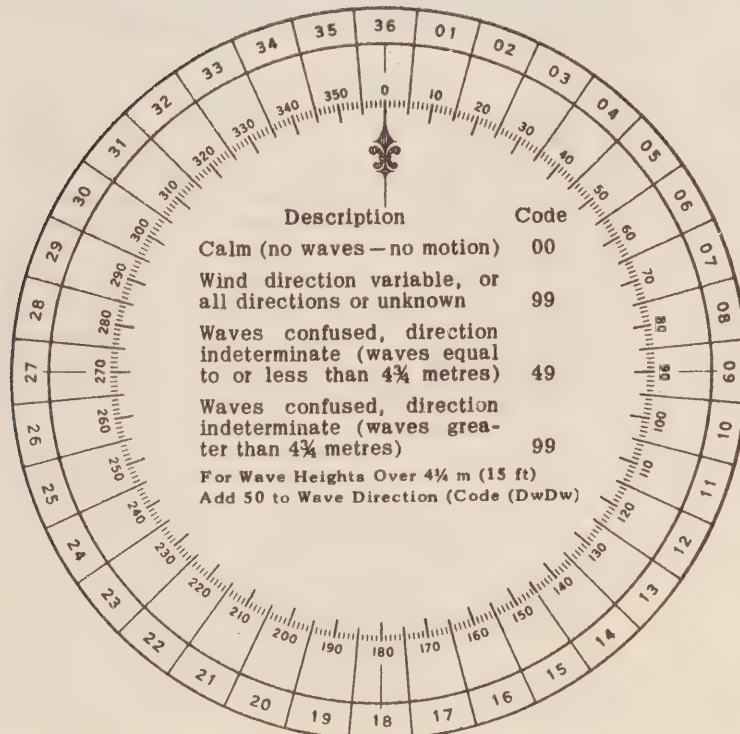
Table 1
CONVERSION
MINUTES TO $\frac{1}{4}$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (Pw)
(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (Hw)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code			Code
0	Less than ¼ m (1 ft)	Add 50 to Dw Dw	0 5 m (16 ft)
1	½ m (1½ ft)		1 5½ m (17½ ft)
2	1 m (3 ft)		2 6 m (19 ft)
3	1½ m (5 ft)		3 6½ m (21 ft)
4	2 m (6½ ft)		4 7 m (22½ ft)
5	2½ m (8 ft)		5 7½ m (24 ft)
6	3 m (9½ ft)		6 8 m (25½ ft)
7	3½ m (11 ft)		7 8½ m (27 ft)
8	4 m (13 ft)		8 9 m (29 ft)
9	4½ m (14 ft)		9 9½ m (30½ ft) or more
x	Height not determined		

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww			
No meteors except photometeors	00	Cloud development not observed or not observable	
	01	Clouds generally dissolving or becoming less developed	
	02	State of sky on the whole unchanged	
	03	Clouds generally forming or developing	
Haze, dust, sand or smoke	04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes	
	05	Haze	
	06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
	07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
	08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
	09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
	10	Mist	
	11	Patches of	shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea
	12	More of less continuous	
	13	Lightning visible, no thunder heard	
	14	Precipitation within sight, not reaching the ground or the surface of the sea	
	15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station	
	16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station	
	17	Thunderstorm, but no precepitation at the time of observation	
	18	Squalls	at or within sight of the station during the preceding hour or at the time of observation
	19	Funnel clouds	
ww = 20 - 29			
	20	Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation	
	21	Drizzle (not freezing) or snow grains	
	22	Rain (not freezing)	
	23	Snow	
	24	Rain and snow or ice pellets, type (a)	
	25	Freezing drizzle or freezing rain	
	26	Shower (s) of rain	
	27	Shower (s) of snow, or of rain and snow	
	28	Shower (s) of hail, or of rain and hail	
	29	Fog or ice fog	
	29	Thunderstorm (with or without precipitation)	
ww = 30 - 39			
	30	Duststorm, sandstorm, drifting or blowing snow	
	31	Slight or moderate dust-storm or sand-storm	
	32	Slight or moderate dust-storm or sand-storm	
	33	Severe dust-storm or sand-storm	
	34	Severe dust-storm or sand-storm	
	35	Severe dust-storm or sand-storm	
	36	Slight or moderate blowing snow	
	37	Heavy drifting snow	
	38	Slight or moderate blowing snow	
	39	Heavy blowing snow	
ww = 40 - 49			
	40	Fog or ice fog at the time of observation	
	41	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer	
	42	Fog or ice fog in patches	
	43	Fog or ice fog, sky visible	
	44	Fog or ice fog, sky invisible	
	45	Fog or ice fog, sky visible	
	46	Fog or ice fog, sky invisible	
	47	Fog or ice fog, sky visible	
	48	Fog or ice fog, sky invisible	
	49	Fog, depositing rime, sky visible	
	49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

50	Drizzle, not freezing, intermittent	} slight at time of observation
51	Drizzle, not freezing, continuous	
52	Drizzle, not freezing, intermittent	} moderate at time of observation
53	Drizzle, not freezing, continuous	
54	Drizzle, not freezing, intermittent	} heavy (dense) at time of observation
55	Drizzle, not freezing, continuous	
56	Drizzle, freezing, slight	
57	Drizzle, freezing, moderate or heavy (dense)	
58	Drizzle and rain, slight	
59	Drizzle and rain, moderate or heavy	

ww = 60 - 69 Rain

60	Rain, not freezing, intermittent	} slight at time of observation
61	Rain, not freezing, continuous	
62	Rain, not freezing, intermittent	} moderate at time of observation
63	Rain, not freezing, continuous	
64	Rain, not freezing, intermittent	} heavy at time of observation
65	Rain, not freezing, continuous	
66	Rain, freezing, slight	
67	Rain, freezing, moderate or heavy	
68	Rain or drizzle and snow, slight	
69	Rain or drizzle and snow, moderate or heavy	

70 - 79 Solid precipitation not in showers

ww		
70	Intermittent fall of snow flakes	} slight at time of observation
71	Continuous fall of snow flakes	
72	Intermittent fall of snow flakes	} moderate at time of observation
73	Continuous fall of snow flakes	
74	Intermittent fall of snow flakes	} heavy at time of observation
75	Continuous fall of snow flakes	
76	Ice prisms (with or without fog)	
77	Snow grains (with or without fog)	
78	Isolated starlike snow crystals (with or without fog)	
79	Ice pellets, type (a)	

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

80	Rain shower(s), slight	
81	Rain shower(s), moderate or heavy	
82	Rain shower(s), violent	
83	Shower(s) of rain and snow mixed, slight	
84	Shower(s) of rain and snow mixed, moderate or heavy	
85	Snow shower(s), slight	
86	Snow shower(s), moderate or heavy	
87	Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed	} - slight
88	Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder	
89	Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder	} - moderate or heavy
90	Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder	
91	Slight rain at time of observation	} thunderstorm during the preceding hour but not at time of observation
92	Moderate or heavy rain at time of observation	
93	Slight snow, or rain and snow mixed or hail at time of observation	
94	Moderate or heavy snow, or rain and snow mixed or hail at time of observation	
95	Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation	} thunderstorm at time of observation
96	Thunderstorm, slight or moderate, with hail at time of observation	
97	Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation	
98	Thunderstorm, combined with duststorm or sandstorm at time of observation	
99	Thunderstorm, heavy, with hail at time of observation	

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{3}{4}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11

CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N. B.
04. Arctic Biological Station, St. Anne de Bellevue, P. Q.
05. Biological Station, St. John's, Nfld.
06. Station de Biologie Marine, Grande Riviere, P. Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N. S.
09. Pacific Naval Laboratory, Esquimalt, B. C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION 111

Serial oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Inland Region Oceanographic Research
<u>Observation Platform:</u>	CCS "Cartier"
<u>Vessel's cruising speed:</u>	9 knots
<u>Total number of stations occupied:</u>	63
<u>Anemometer height above sea level:</u>	12 metres
<u>Barometer readings</u>	Aneroid Barometer (corrected)
<u>Air temperature</u>	Sling Psychrometer
<u>Wet bulb temperature</u>	Sling Psychrometer
<u>Surface sea water temperature</u>	Bucket sample (deck thermometer)

C-REF-NO 003	YR 1963	DEPTH	99	WAVES 1 00X0	AIR T 18.4	VIS 7
CONS. NO 001	MONTH 8	MXSAMPD	01	WAVES 2 00X0	WET B 14.3	STN 001
LAT 48-247N	DAY 19	NO.DPTH	6	WND-DIR 190	WW-CODE 02	
LON 70-500W	HR 02.2	W-COLOR		WND-SPD 05	CLD-TPE 0	
MARSD SQ 152	C/I 1813	W-TRNSP	03	BARO 1012.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
022	0000	149	08010	679	0534	14751
022	0010	1012	15450	680	1178	14665
022	0020	0412	27130	756	2156	14572
022	0030	0249	27961	728	2234	14513
022	0050	0144	28724	610	2301	14480
022	0080	0086	29164	571	2339	14465

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1490	08010		0534	14751	0000	00000	22047
0010	1012	15450		1178	14665	0187	00008	15716
0020	0412	27130		2156	14572	0296	00022	6254
0030	0249	27961		2234	14513	0355	00037	5503
0050	0144	28724		2301	14480	0459	00078	4859
0075	0067 B	2922 I		2345	14456	0576	00152	4443

C-REF-NO 003	YR 1963	DEPTH 267	WAVES 1 00X0	AIR T 17.2	VIS 8
CONS. NO 002	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 13.8	STN 002
LAT 48-220N	DAY 20	NO.DPTH 10	WND-DIR 300	WW-CODE 01	
LON 70-345W	HR 04.8	W-COLOR	WND-SPD 03	CLD-TPE	
MAKSD SQ 152	C/I 1813	W-TRNSP	BARO 1012.0	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
060	0000	145	08700	536	0593	14745
060	0010	1181	15080	536	1126	14724
060	0020	0592	26512	502	2090	14639
060	0030	0368	27980	519	2227	14566
060	0050	0263	28780	529	2298	14534
049	0067	0180	29110	501	2330	14504
049	0089	0178	29334	539	2348	14510
049	0112	0169	29504	445	2362	14512
049	0134	0063	29691	481	2383	14470
049	0156	0065	30127	445	2418	14481

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1450	08700		0593	14745	0000	00000	21458
0010	1181	15080		1126	14724	0186	00008	16223
0020	0592	26512		2090	14639	0302	00023	6886
0030	0368	27980		2227	14566	0364	00039	5574
0050	0263	28780		2298	14534	0469	00081	4889
0075	0173	2921 B		2338	14504	0587	00155	4505
0100	0181	2942 B		2355	14514	0698	00254	4349
0125	0106 B	2960 C		2373	14487	0805	00377	4169
0150	0073 B	3001 C		2407	14482	0906	00518	3840

C-REF-NO 003	YR 1963	DEPTH 271	WAVES 1 00X0	AIR T 15.9	VIS 8
CONS. NO 003	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 13.7	STN 003
LAT 48-212N	DAY 20	NO.DPTH 11	WND-DIR 110	WW-CODE 02	
LON 70-237W	HR 08.0	W-COLOR	WND-SPD 02	CLD-TPE 0	
MARSD SQ 152	C/I 1813	W-TRNSP	BARO 1023.0	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
080	0000	149	09670	615	0661	14770
103	0010	0815	23400	588	1821	14687
103	0020	0498	27374	632	2167	14611
103	0030	0352	28324	627	2255	14563
103	0050	0296	28865	638	2303	14550
103	0075	0248	29270	607	2338	14538
081	0095	0267	29462	247	2352	14552
081	0118	0278	29629	480	2365	14563
081	0142	0137	29742		2383	14506
081	0165	0071	30296	418	2431	14487
081	0189	0084	30468	376	2444	14500

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1490	09670		0661	14770	0000	00000	20789
0010	0815	23400		1821	14687	0150	00005	9477
0020	0498	27374		2167	14611	0228	00016	6144
0030	0352	28324		2255	14563	0286	00030	5300
0050	0296	28865		2303	14549	0388	00071	4848
0075	0248	29270		2338	14538	0505	00146	4506
0100	0276	29503		2355	14557	0616	00245	4349
0125	0241 B	2964 F		2368	14548	0724	00368	4219
0150	0106	2993 I		2400	14496	0826	00511	3913
0175	0068	3028 I		2430	14487	0921	00668	3625

C-REF-NO 003	YR 1963	DEPTH 269	WAVES 1 00X0	AIR T 14.3	VIS 7
CONS. NO 004	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 12.8	STN 004
LAT 48-178N	DAY 20	NO.DPTH 11	WND-DIR 120	WW-CODE 03	
LON 70-147W	HR 11.8	W-COLOR	WND-SPD 03	CLD-TPE 3	
MARSD SQ 152	C/I 1813	W-TRNSP 02	BARO 1010.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
118	0000	142	10840	592	0763	14759
131	0010	0871	22065	612	1710	14693
131	0020	0473	27590	646	2187	14604
131	0030	0365	28340	639	2256	14569
131	0050	0295	28961	634	2310	14550
131	0075	0323	29313	625	2336	14571
118	0100	0334	29450	475	2346	14582
118	0125	0311	29666	377	2365	14579
118	0150	0209	29876	414	2389	14541
118	0175	0114	30452	428	2441	14511
118	0200	0097	30562	359	2451	14509

#WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1420	10840		0763	14759	0000	00000	19789
0010	0871	22065		1710	14692	0151	00005	10549
0020	0473	27590		2187	14604	0233	00017	5958
0030	0365	28340		2256	14569	0290	00031	5299
0050	0295	28961		2310	14550	0391	00072	4774
0075	0323	29313		2336	14571	0508	00146	4528
0100	0334	29450		2346	14582	0620	00246	4433
0125	0311	29666		2365	14579	0729	00371	4252
0150	0209	29876		2389	14541	0833	00517	4018
0175	0114	30452		2441	14511	0928	00674	3521
0200	0097	30562		2451	14509	1015	00841	3427

C-REF-NO 003	YR 1963	DEPTH 195	WAVES 1 00X0	AIR T 14.7	VIS 6
CONS. NO 005	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 13.0	STN 005
LAT 48-153N	DAY 20	NO.DPTH 8	WND-DIR 240	WW-CODE 81	
LON 70-048W	HR 14.4	W-COLOR	WND-SPD 01	CLD-TPE 7	
MAKSD SQ 152	C/I 1813	W-TRNSP 03	BARO 1009.6	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
144	0000	149	10610	656	0733	14781
159	0010	0934	20401	623	1572	14696
159	0020	0550	26645	622	2105	14623
159	0030	0423	28058	623	2228	14590
159	0050	0326	29026	620	2313	14565
144	0075	0344	29325	656	2335	14581
144	0099	0329	29637	641	2361	14582
144	0177	0139				

‡WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1490	10610		0733	14781	0000	00000	20079
0010	0934	20401		1572	14696	0159	00006	11880
0020	0550	26645		2105	14623	0252	00019	6744
0030	0423	28058		2228	14590	0313	00034	5560
0050	0326	29026		2313	14565	0417	00075	4748
0075	0344	29325		2335	14581	0533	00149	4536
0100	0332							
0125	0296							
*0150	0234							
*0175	0147							

C-REF-NO 003	YR 1963	DEPTH 155	WAVES 1 00X0	AIR T 14.8	VIS 8
CONS. NO 006	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B 13.0	STN 006
LAT 48-131N	DAY 20	NO.DPTH 8	WND-DIR 270	WW-CODE 03	
LQN 69-532W	HR 17.1	W-COLOR	WND-SPD 04	CLD-TPE 3	
MARSD SQ 151	C/I 1813	W-TRNSP 03	BARO 1008.3	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
171	0000	134	10750	558	0768	14729
177	0010	0606	25411	472	2002	14629
177	0020	0463	27724	434	2198	14601
171	0030	0425	28279	398	2246	14594
171	0050	0371	29059	396	2312	14585
171	0075	0353	29442	379	2344	14586
171	0100	0348	29663	445	2362	14591
171	0125	0340	29774	362	2371	14593

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1340	10750		0768	14729	0000	00000	19731
0010	0606	25411		2002	14629	0137	00004	7731
0020	0463	27724		2198	14601	0205	00014	5848
0030	0425	28279		2246	14594	0261	00028	5395
0050	0371	29059		2312	14585	0363	00069	4759
0075	0353	29442		2344	14586	0479	00142	4455
0100	0348	29663		2362	14591	0588	00240	4284
0125	0340	29774		2371	14593	0695	00362	4193

C-REF-NO 003	YR 1963	DEPTH 252	WAVES 1	XX	AIR T 13.0	VIS B
CONS. NO 007	MONTH 8	MXSAMPD 02	WAVES 2	XX	WET B 11.2	STN 007
LAT 48-084N	DAY 20	NO.DPTH 11	WND-DIR 300	WW-CODE 02		
LON 69-461W	HR 19.2	W-COLOR 60	WND-SPD 02	CLD-TPE 3		
MARSD SQ 151	C/I 1813	W-TRNSP 05	BARO 1007.5	CLD-AMT 8		HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
202	0000	070	24744	611	1939	14657
202	0009	0517	27234	599	2154	14616
202	0018	0429	28259	604	2244	14594
202	0026	0408	28783	584	2287	14593
202	0044	0364	29120	599	2318	14581
202	0066	0307	30078	625	2398	14573
192	0076	0360	29478	500	2346	14590
192	0094	0348	29538	516	2352	14588
192	0113	0344	29642	487	2361	14591
192	0132	0339	29692	541	2365	14593
192	0151	0311	29975	517	2390	14588

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0700	24744		1939	14657	0000	00000	8333
0010	0503	2740 F		2168	14612	0072	00003	6133
0020	0421	2842 B		2257	14593	0130	00012	5286
0030	0398	2889 I		2296	14591	0181	00025	4909
0050	0337 B	2951 I		2350	14576	0274	00062	4392
0075	0355	2954 F		2352	14588	0384	00133	4380
0100	0346	29572		2355	14589	0494	00231	4351
0125	0342	2966 D		2362	14593	0602	00355	4279
0150	0313	29960		2388	14588	0707	00502	4030

C-REF-NO 003	YR 1963	DEPTH 91	WAVES 1 XX	AIR T 13.0	VIS 8
CONS. NO 008	MONTH 8	MXSAMPD 00	WAVES 2 XX	WET B 11.2	STN 008
LAT 48-075N	DAY 20	NO.DPTH 5	WND-DIR 210	WW-CODE 01	
LON 69-414W	HR 21.6	W-COLOR	WND-SPD 02	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 06	BARO 1007.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
216	0000	069	25566	631	2005	14664
216	0010		28423	604		
216	0020		28683	592		
216	0030		28947	560		
216	0050		30254	580		

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0690	25566		2005	14664	0000	00000	7702
0010		28423						
0020		28683						
0030		28947						
0050		30254						

C-REF-NO 003	YR 1963	DEPTH 159	WAVES 1 22X1	AIR T 09.9	VIS 7
CONS. NO 009	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B 09.1	STN 009
LAT 48-100N	DAY 20	NO.DPTH 8	WND-DIR 250	WW-CODE 01	
LON 69-342W	HR 22.7	W-COLOR 20	WND-SPD 02	CLD-TPE 8	
MAKSD SQ 151	C/I 1813	W-TRNSP 08	BARO 1006.8	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
233	0000	048	30085	562	2383	14636
233	0010	0254	30798	451	2460	14551
227	0020	0123	31591	518	2532	14505
227	0030	0021	32167	624	2584	14468
227	0050	-0012	32353	524	2600	14459
227	0075	0049	32868	407	2638	14498
227	0100	0098	33084	423	2653	14527
227	0125	0134		379		

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0480	30085		2383	14636	0000	00000	4081
0010	0254	30798		2460	14551	0037	00002	3351
0020	0123	31591		2532	14505	0068	00006	2663
0030	0021	32167		2584	14468	0092	00012	2171
0050	-0012	32353		2600	14459	0134	00029	2014
0075	0049	32868		2638	14498	0180	00058	1649
0100	0098	33084		2653	14527	0220	00094	1512
0125	0134							

C-REF-NO 003 YR 1963 DEPTH 331 WAVES 1 25X1 AIR T 08.9 VIS 7
 CONS. NO 010 MONTH 8 MXSAMPD 03 WAVES 2 00X0 WET B 08.4 STN 010
 LAT 48-161N DAY 21 NO.DPTH 12 WND-DIR 250 WW-CODE 02
 LON 69-245W HR 01.2 W-COLOR WND-SPD 02 CLD-TPE 8
 MARSD SQ 151 C/I 1813 W-TRNSP 05 BARO 1007.0 CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
027	0000	054	29737	522	2349	14657
027	0010	0452	30001	610	2379	14625
027	0020	0299	30648	565	2444	14570
027	0030	0257	30899	619	2467	14557
027	0050	0127	31656	683	2537	14513
027	0075	-0020	32399	675	2604	14460
027	0100	0060	32714	550	2625	14505
027	0149	0286	33841	309	2700	14629
012	0174	0300	33903	304	2703	14640
012	0199	0309	33906	298	2703	14648
012	0248	0369	34157	250	2717	14685
012	0298	0415	34360	203	2728	14715

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0540	29737		2349	14657	0000	00000	4403
0010	0452	30001		2379	14625	0043	00002	4118
0020	0299	30648		2444	14570	0081	00008	3498
0030	0257	30899		2467	14557	0115	00016	3277
0050	0127	31656		2537	14513	0174	00040	2616
0075	-0020	32399		2604	14460	0232	00076	1974
0100	0060	32714		2625	14505	0279	00118	1772
0125	0186 D	3333 I		2667	14574	0319	00163	1385
0150	0287	33847		2700	14630	0350	00207	1076
0175	0300	33903		2703	14640	0377	00251	1047
0200	0310	33910		2703	14648	0403	00302	1052
0225	0338	3402 E		2709	14666	0429	00358	0996
0250	0360 B	3411 I		2714	14681	0454	00418	0954
0300	0418	34373		2729	14717	0498	00544	0820

C-REF-NO 003 YR 1963 DEPTH 77 WAVES 1 25X3 AIR T 14.8 VIS 7
 CONS. NO 011 MONTH 8 MXSAMPD 00 WAVES 2 00X0 WET B 12.0 STN 011
 LAT 48-577N DAY 21 NO.DPTH 5 WND-DIR 250 WW-CODE 01
 LON 67-091W HR 14.0 W-COLOR WND-SPD 10 CLD-TPE 6
 MARSD SQ 151 C/I 1813 W-TRNSP 05 BARO 1007.9 CLD-AMT 5 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
140	0000	119	26733	679	2023	14868
140	0010	1171	26727	696	2026	14863
140	0020	0959	27473	634	2118	14796
140	0030	0539	28847	638	2279	14649
140	0050	0391	30188	634	2400	14608

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1190	26733		2023	14868	0000	00000	7526
0010	1171	26727		2026	14863	0075	00004	7500
0020	0959	27473		2118	14796	0146	00014	6619
0030	0539	28847		2279	14649	0205	00029	5073
0050	0391	30188		2400	14608	0295	00065	3923

C-REF-NO 003	YR 1963	DEPTH 101	WAVES 1 24X3	AIR T 14.2	VIS 6
CONS. NO 012	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B 11.9	STN 012
LAT 48-585N	DAY 21	NO.DPTH 7	WND-DIR 240	WW-CODE 60	
LON 67-100W	HR 15.3	W-COLOR	WND-SPD 08	CLD-TPE 7	
MARSD SQ 151	C/I 1813	W-TRNSP 05	BARO 1006.8	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
153	0000	118	26883	696	2037	14866
153	0010	1176	26862	652	2036	14866
153	0020	0628	28557	610	2247	14681
153	0030	0505	28954	599	2291	14637
153	0049	0384	30440	623	2420	14609
153	0074	0114	31888	698	2556	14514
153	0099	-0012	32509	624	2613	14469

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1180	26883		2037	14866	0000	00000	7398
0010	1176	26862		2036	14866	0074	00004	7409
0020	0628	28557		2247	14681	0138	00013	5385
0030	0505	28954		2291	14637	0190	00026	4959
0050	0373	30511		2427	14605	0277	00060	3663
0075	0150 G	3189 I		2554	14530	0354	00108	2453
0100	-0018	32521		2614	14466	0408	00155	1881

C-REF-NO 003	YR 1963	DEPTH 139	WAVES 1 25X3	AIR T 14.4	VIS 7
CONS. NO 013	MONTH 8	MXSAMPD 01	WAVES 2 XX	WET B 12.8	STN 013
LAT 48-595N	DAY 21	NO.DPTH 8	WND-DIR 250	WW-CODE 01	
LQN 67-110W	HR 17.2	W-COLOR 60	WND-SPD 07	CLD-TPE 8	
MARSD SQ 151	C/I 1813	W-TRNSP 06	BARO 1006.6	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
172	0000	119	26951	470	2040	14871
178	0010	1206	26972	525	2039	14878
172	0020	0794	27897	445	2174	14738
172	0030	0520	28989	398	2292	14643
172	0050	0431	30923	405	2454	14635
172	0075	0076	31979	434	2566	14498
172	0100	-0024	32443	421	2608	14463
172	0125	0053	32956	421	2645	14509

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1190	26951		2040	14871	0000	00000	7364
0010	1206	26972		2039	14878	0074	00004	7377
0020	0794	27897		2174	14738	0141	00014	6078
0030	0520	28989		2292	14643	0196	00028	4947
0050	0431	30923		2454	14635	0280	00060	3405
0075	0076	31979		2566	14498	0353	00105	2341
0100	-0024	32443		2608	14463	0406	00152	1938
0125	0053	32956		2645	14509	0451	00203	1583

C-REF-NO 003	YR 1963	DEPTH 227	WAVES 1 24X3	AIR T 14.8	VIS 7
CONS. NO 014	MONTH 8	MXSAMPD 01	WAVES 2 XX	WET B 12.4	STN 014
LAT 49-010N	DAY 21	NO.DPTH 7	WND-DIR 230	WW-CODE 01	
LON 67-121W	HR 18.6	W-COLOR	WND-SPD 10	CLD-TPE 8	
MARSD SQ 151	C/I 1813	W-TRNSP 05	BARO 1005.8	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
198	0000	120	26936	506	2037	14874
198	0010	1184	26940	651	2040	14870
198	0020	1075	27203	602	2079	14836
198	0030	0489	29168	537	2310	14633
198	0050	0377	31279	534	2488	14617
186	0075	0069	31940	450	2563	14494
186	0100	-0034	32509	497	2613	14459

I N T E R P O L A T E D

DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1200	26936		2037	14874	0000	00000	7392
0010	1184	26940		2040	14870	0074	00004	7364
0020	1075	27203		2079	14836	0146	00015	6994
0030	0489	29168		2310	14633	0205	00029	4782
0050	0377	31279		2488	14617	0284	00060	3087
0075	0069	31940		2563	14494	0352	00102	2367
0100	-0034	32509		2613	14459	0406	00150	1883

C-REF-NO 003	YR 1963	DEPTH 327	WAVES 1 23X4	AIR T 14.1	VIS 7
CONS. NO 015	MONTH 8	MXSAMPD 03	WAVES 2 XX	WET B 12.0	STN 015
LAT 49-050N	DAY 21	NO.DPTH 13	WND-DIR 230	WW-CODE 02	
LON 67-150W	HR 21.0	W-COLOR	WND-SPD 12	CLD-TPE 8	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1006.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
210	0000	112	27575	686	2100	14853
214	0010	1085	27523	616	2102	14842
214	0020	0684	28505	519	2236	14702
214	0030	0456	29533	507	2342	14624
214	0050	0230	31444	508	2513	14555
214	0075	0072	32167	543	2581	14499
214	0100	0003	32597	349	2619	14477
214	0125	0062	32901	480	2640	14513
210	0146	0167	33391	412	2673	14570
210	0170	0249	33666	349	2689	14614
210	0194	0297	33827	303	2697	14641
214	0242	0401	34252	232	2721	14699
214	0291	0482	34606	244	2741	14745

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1120	27575		2100	14853	0000	00000	6787
0010	1085	27523		2102	14842	0068	00003	6771
0020	0684	28505		2236	14702	0129	00013	5488
0030	0456	29533		2342	14624	0179	00025	4475
0050	0230	31444		2513	14555	0253	00053	2844
0075	0072	32167		2581	14499	0316	00093	2195
0100	0003	32597		2619	14477	0367	00138	1832
0125	0062	32901		2640	14513	0411	00188	1630
0150	0183	3345 B		2677	14579	0447	00239	1291
0175	0260	3370 B		2691	14620	0478	00290	1163
0200	0310	3388 B		2700	14648	0507	00345	1076
0225	0365	3410 C		2713	14679	0532	00400	0965
0250	0411	3428 G		2723	14704	0555	00457	0875

C-REF-NO 003	YR 1963	DEPTH 327	WAVES 1 26X1	AIR T 14.4	VIS 8
CONS. NO 016	MONTH 8	MXSAMPD 03	WAVES 2 23X3	WET B 12.8	STN 016
LAT 49-096N	DAY 22	NO.DPTH 13	WND-DIR 260	WW-CODE 02	
LON 67-180W	HR 00.6	W-COLOR	WND-SPD 04	CLD-TPE 8	
MARSD SQ 151	C/I 1813	W-TRNSP 05	BARO 1007.1	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
006	0000	097	27067	672	2085	14792
022	0010	0963	27323		2106	14794
022	0020	0459	29259		2320	14620
022	0030	0398	29639	650	2356	14601
022	0050	0204	31527	724	2521	14545
022	0075	0010	32257	713	2591	14472
022	0100	-0026	32558	667	2617	14463
006	0121	0000	32731	545	2630	14481
006	0145	0052	33019	500	2650	14513
006	0169	0150	33329	403	2669	14565
006	0193	0259	33714	315	2692	14623
006	0242	0419	34351	222	2727	14708
006	0290	0475	34613	258	2742	14742

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0970	27067		2085	14792	0000	00000	6936
0010	0963	27323		2106	14794	0068	00003	6736
0020	0459	29259		2320	14620	0126	00012	4684
0030	0398	29639		2356	14601	0171	00023	4343
0050	0204	31527		2521	14545	0242	00051	2763
0075	0010	32257		2591	14472	0304	00089	2096
0100	-0026	32558		2617	14463	0353	00133	1849
0125	0006	32775		2633	14485	0398	00184	1697
0150	0070	33080		2654	14523	0438	00241	1499
0175	0178	3342 B		2675	14580	0474	00299	1309
0200	0288	3382 B		2698	14638	0504	00357	1098
0225	0374	3416 B		2717	14683	0529	00413	0925
0250	0432	3439 E		2729	14715	0551	00466	0815

C-REF-NO 003	YR 1963	DEPTH 318	WAVES 1 29X1	AIR T 09.4	VIS 8
CONS. NO 017	MONTH 8	MXSAMPD 03	WAVES 2 24X2	WET B 09.0	STN 017
LAT 49-129N	DAY 22	NO.DPTH 13	WND-DIR 290	WW-CODE 02	
LOX 67-198W	HR 03.7	W-COLOR	WND-SPD 03	CLD-TPE 8	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1007.1	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
037	0000	082	27083	696	2107	14735
050	0010	0646	28812	584	2265	14690
050	0020	0426	29422	568	2336	14608
050	0030	0429	30208	593	2398	14621
050	0050	0171	31748	461	2541	14533
050	0075	-0006	32337	593	2598	14466
054	0097	-0011	32652	576	2624	14471
037	0123	0045	32962	562	2646	14505
037	0147	0104	33200	479	2662	14539
037	0172	0211	33560	390	2683	14596
037	0197	0317	33937	284	2704	14651
037	0246	0428	34395	230	2730	14713
037	0294	0464	34602	247	2742	14738

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0820	27083		2107	14735	0000	00000	6719
0010	0646	28812		2265	14690	0060	00003	5213
0020	0426	29422		2336	14608	0109	00010	4531
0030	0429	30208		2398	14621	0151	00021	3941
0050	0171	31748		2541	14533	0217	00046	2573
0075	-0006	32337		2598	14465	0275	00082	2028
0100	-0006	32691		2627	14474	0322	00125	1756
0125	0049	32981		2648	14508	0364	00172	1562
0150	0116	33240		2664	14546	0401	00225	1405
0175	0225	33607		2686	14603	0434	00279	1206
0200	0327	33974		2706	14656	0462	00333	1019
0225	0393	3424 B		2721	14692	0486	00385	0889
0250	0442 B	3444 D		2732	14720	0508	00437	0790

C-REF-NO 003	YR 1963	DEPTH 300	WAVES 1 27X1	AIR T 09.6	VIS 8
CONS. NO 018	MONTH 8	MXSAMPD 03	WAVES 2 XX	WET B 08.8	STN 018
LAT 49-170N	DAY 22	NO.DPTH 12	WND-DIR 270	WW-CODE 02	
LON 67-230W	HR 06.8	W-COLOR	WND-SPD 06	CLD-TPE 8	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1007.9	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
068	0000	061		580		
079	0010	0478	29543	584	2340	14630
079	0020	0338	30883	619	2460	14590
079	0030	0237	31466	629	2514	14556
079	0050	0096	32018	677	2568	14504
079	0075	0041	32252	662	2589	14486
068	0099	-0019	32547	571	2616	14466
068	0124	0089	33092	479	2654	14527
068	0149	0159	33357	412	2671	14566
068	0173	0271	33762	283	2695	14625
068	0198	0385	34151	245	2715	14683
068	0267	0455	34554	235	2739	14730

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0610	2790 I		2197	14661	0000	00000	5863
0010	0478	29543		2340	14630	0052	00002	4488
0020	0338	30883		2460	14590	0091	00008	3351
0030	0237	31466		2514	14556	0122	00016	2832
0050	0096	32018		2568	14504	0174	00037	2323
0075	0041	32252		2589	14486	0230	00072	2115
0100	-0016	32569		2618	14468	0280	00116	1845
0125	0092	33104		2655	14529	0322	00164	1493
0150	0163	33373		2672	14569	0358	00214	1337
0175	0281	33796		2696	14630	0388	00265	1111
0200	0378 B	3415 F		2715	14681	0414	00315	0939
0225	0435 B	3438 F		2728	14712	0437	00363	0824
*0250	0458	3452 C		2736	14728	0456	00411	0750

C-REF-NO 003	YR 1963	DEPTH 238	WAVES 1 27X1	AIR T 07.3	VIS 8
CONS. NO 019	MONTH 8	MXSAMPD 02	WAVES 2 XX	WET B 06.6	STN 019
LAT 49-180N	DAY 22	NO.DPTH 11	WND-DIR 270	WW-CODE 02	
LON 67-225W	HR 09.2	W-COLOR	WND-SPD 04	CLD-TPE 8	
MARSD SQ 151	C/I 1813	W-TRNSP 08	BARO 1009.0	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
092	0000	055	29196	519	2306	14654
105	0010	0362	30612	541	2436	14595
105	0020	0289	31342	538	2500	14575
105	0030	0227	31716	560	2535	14555
105	0050	0101	32050	438	2570	14506
092	0074	0026	32279	567	2592	14479
092	0099	0019	32624	501	2620	14485
092	0123	0062	32917	423	2642	14513
092	0148	0126	33174	418	2658	14549
092	0172	0278	33725	317	2691	14628
092	0197	0346	34042	265	2710	14665

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0550	29196		2306	14654	0000	00000	4820
0010	0362	30612		2436	14595	0042	00002	3576
0020	0289	31342		2500	14575	0075	00007	2965
0030	0227	31716		2535	14555	0103	00014	2635
0050	0101	32050		2570	14506	0153	00034	2301
0075	0025	32292		2593	14479	0208	00069	2076
0100	0020	32637		2621	14486	0257	00112	1810
0125	0065	3293 B		2643	14514	0300	00162	1608
0150	0139	3322 B		2661	14556	0338	00215	1436
0175	0260 E	3368 I		2689	14619	0371	00270	1180

C-REF-NO 003	YR 1963	DEPTH 234	WAVES 1 32X1	AIR T 14.4	VIS 9
CONS. NO 020	MONTH 8	MXSAMPD 02	WAVES 2 XX	WET B 11.4	STN 020
LAT 49-420N	DAY 22	NO.DPTH 11	WND-DIR 320	WW-CODE 02	
LON 66-517W	HR 14.5	W-COLOR	WND-SPD 07	CLD-TPE 8	
MARSD SQ 151	C/I 1813	W-TRNSP 08	BARO 1001.0	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
145	0000	111	29651	625	2263	14876
153	0010	1083	29664	625	2268	14868
153	0020	0621	30696	653	2416	14706
153	0030	0106	31924	547	2560	14503
153	0050	-0003	32412	564	2604	14464
145	0075	0008	32653	563	2623	14476
145	0100	0054	32968	470	2646	14506
145	0125	0127	33245	445	2664	14547
145	0150	0208	33530	376	2681	14591
145	0175	0311	33878	288	2700	14644
145	0200	0377	34159	257	2716	14680

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1110	29651		2263	14876	0000	00000	5231
0010	1083	29664		2268	14868	0052	00003	5180
0020	0621	30696		2416	14706	0097	00009	3772
0030	0106	31924		2560	14503	0128	00017	2400
0050	-0003	32412		2604	14464	0172	00034	1973
0075	0008	32653		2623	14476	0220	00064	1793
0100	0054	32968		2646	14506	0262	00102	1575
0125	0127	33245		2664	14547	0300	00145	1408
0150	0208	33530		2681	14591	0333	00192	1251
0175	0311	33878		2700	14644	0362	00241	1075
0200	0377	34159		2716	14680	0388	00289	0929

C-REF-NO 003	YR 1963	DEPTH 27	WAVES 1 28X1	AIR T 15.0	VIS 8
CONS. NO 021	MONTH 8	MXSAMPD 00	WAVES 2 XX	WET B 11.1	STN 021
LAT 50-004N	DAY 22	NO.DPTH 4	WND-DIR 300	WW-CODE 02	
LON 66-480W	HR 18.5	W-COLOR 50	WND-SPD 07	CLD-TPE 8	
MARSD SQ 187	C/I 1813	W-TRNSP 09	BARO 1009.6	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
185	0000	082	30318	625	2360	14776
185	0010	0644	30599	536	2405	14712
185	0020	0310	31441	573	2506	14585
185	0025	0231	31725	573	2535	14556

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0820	30318		2360	14776	0000	00000	4302
0010	0644	30599		2405	14712	0041	00002	3870
0020	0310	31441		2506	14585	0075	00007	2906

C-REF-NO 003	YR 1963	DEPTH 18	WAVES 1	XX	AIR T 18.3	VIS 8
CONS. NO 022	MONTH 8	MXSAMPD 00	WAVES 2	XX	WET B 13.3	STN 022
LAT 50-020N	DAY 22	NO.DPTH 3	WND-DIR 270		WW-CODE 03	
LON 66-470W	HR 19.8	W-COLOR 30	WND-SPD 04		CLD-TPE 8	
MARSD SQ 187	C/I 1813	W-TRNSP 04	BARO		CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
198	0000	072	30376	587	2378	14738
198	0010	0556	30861	597	2436	14680
198	0018	0488	31014	593	2456	14655

I N T E R P O L A T E D

DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0720	30376		2378	14738	0000	00000	4128
0010	0556	30861		2436	14680	0039	00002	3575

C-REF-NO 003	YR 1963	DEPTH	289	WAVES 1 30X1	AIR T 15.3	VIS 9
CONS. NO 023	MONTH 8	MXSAMPD	02	WAVES 2 XX	WET B 12.4	STN 023
LAT 49-567N	DAY 23	NO.DPTH	11	WND-DIR 300	WW-CODE 02	
LON 66-110W	HR 01.1	W-COLOR		WND-SPD 07	CLD-TPE	
MARSD SQ 151	C/I 1813	W-TRNSP	05	BARO 1012.0	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
011	0000	128	29445		2216	14933
021	0010	1234	29630		2239	14921
021	0020	0175	31738		2540	14530
021	0030	-0032	32232		2591	14445
021	0050	-0040	32439		2608	14447
021	0075	0016	32857		2639	14483
011	0100	0098	33167		2660	14529
011	0125	0232	33622		2687	14598
011	0150	0304	33851		2699	14637
011	0175	0359	34070		2711	14667
011	0200	0397	34136		2712	14689

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1280	29445		2216	14933	0000	00000	5676
0010	1234	29630		2239	14921	0056	00003	5459
0020	0175	31738		2540	14530	0096	00008	2583
0030	-0032	32232		2591	14445	0120	00014	2099
0050	-0040	32439		2608	14447	0160	00031	1937
0075	0016	32857		2639	14483	0205	00059	1641
0100	0098	33167		2660	14528	0244	00094	1449
0125	0232	33622		2687	14598	0278	00132	1199
0150	0304	33851		2699	14637	0307	00172	1088
0175	0359	34070		2711	14667	0333	00215	0976
0200	0397	34136		2712	14689	0357	00263	0966

C-REF-NO 003 YR 1963 DEPTH 188 WAVES 1 25X1 AIR T 11.1 VIS 8
 CONS. NO 024 MONTH 8 MXSAMPD 02 WAVES 2 XX WET B 09.4 STN 024
 LAT 49-563N DAY 23 NC.DPTH 10 WND-DIR 290 WW-CODE 02
 LON 65-107W HR 07.3 W-COLOR 40 WND-SPD 07 CLD-TPE 6
 MARSD SQ 151 C/I 1813 W-TRNSP 03 BARO 1011.7 CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND
080	0000	112	28653		2184	14867
080	0010	0876	29037		2252	14783
080	0020	0401	30391		2415	14610
080	0030	0227	31610		2526	14553
073	0049	0045	32028		2571	14480
073	0073	-0006	32641		2623	14469
073	0097	0057	32949		2645	14506
073	0121	0102	33159		2659	14534
073	0146	0152	33318		2668	14562
073	0169	0246	33677		2690	14612

I N T E R P O L A T E D

DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1120	28653		2184	14867	0000	00000	5987
0010	0876	29037		2252	14783	0057	00003	5335
0020	0401	30391		2415	14610	0103	00009	3777
0030	0227	31610		2526	14553	0135	00017	2716
0050	0040	32056		2574	14478	0185	00037	2264
0075	-0003	32674		2625	14472	0236	00069	1772
0100	0063	32979		2647	14510	0278	00107	1572
0125	0108	3318 B		2660	14537	0316	00150	1447
0150	0173	3341 I		2674	14574	0351	00199	1312

C-REF-NO 003	YR 1963	DEPTH 60	WAVES 1 25X1	AIR T 07.7	VIS 8
CONS. NO 025	MONTH 8	MXSAMPD 00	WAVES 2 23X2	WET B 06.7	STN 025
LAT 50-151N	DAY 23	NO.DPTH 5	WND-DIR 250	WW-CODE 02	
LON 64-328W	HR 12.4	W-COLOR	WND-SPD 06	CLD-TPE 8	
MARSD SQ 187	C/I 1813	W-TRNSP 08	BARO 1013.3	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
124	0000	056	30945		2442	14681
124	0010	0537	30960		2446	14673
124	0020	0419	31304		2486	14630
124	0030	0385	31394		2496	14619
124	0050	0196	32038		2563	14549

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0560	30945		2442	14681	0000	00000	3515
0010	0537	30960		2446	14673	0035	00002	3480
0020	0419	31304		2486	14630	0068	00007	3105
0030	0385	31394		2496	14619	0099	00015	3006
0050	0196	32038		2563	14549	0153	00036	2370

C-REF-NO 003	YR 1963	DEPTH 60	WAVES 1 24X2	AIR T 10.1	VIS 8
CONS. NO 026	MONTH 8	MXSAMPD 00	WAVES 2 24X2	WET 8 08.5	STN 026
LAT 50-116N	DAY 23	NO.DPTH 5	WND-DIR 240	WW-CODE 02	
LON 64-332W	HR 13.6	W-COLOR	WND-SPD 05	CLD-TPE 8	
MARSD SQ 187	C/I 1813	W-TRNSP 10	BARO 1013.8	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
136	0000	061	30562		2406	14696
136	0010	0544	30708		2425	14673
136	0020	0268	31799		2538	14572
136	0030	0173	32061		2566	14535
136	0040	0127	32213		2581	14519

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0610	30562		2406	14696	0000	00000	3858
0010	0544	30708		2425	14673	0038	00002	3677
0020	0268	31799		2538	14572	0069	00006	2602
0030	0173	32061		2566	14535	0094	00013	2337

C-REF-NO 003	YR 1963	DEPTH 128	WAVES 1 25X2	AIR T 10.4	VIS 8
CONS. NO 027	MONTH 8	MXSAMPD 01	WAVES 2 25X2	WET B 08.7	STN 027
LAT 50-057N	DAY 23	NO.DPTH 7	WND-DIR 250	WW-CODE 03	
LQN 64-328W	HR 14.9	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 187	C/I 1813	W-TRNSP 08	BARO 1013.5	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0000	080	30432		2372	14770
149	0010	0797	30361		2367	14769
149	0020	0581	31120		2454	14695
149	0030	0299	31738		2531	14586
149	0050	0163	32114		2571	14535
149	0075	0091	32399		2598	14511
149	0100	0041	32817		2635	14498

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0800	30432		2372	14770	0000	00000	4190
0010	0797	30361		2367	14769	0042	00002	4240
0020	0581	31120		2454	14695	0081	00008	3409
0030	0299	31738		2531	14586	0111	00016	2673
0050	0163	32114		2571	14535	0161	00036	2290
0075	0091	32399		2598	14511	0216	00070	2029
0100	0041	32817		2635	14498	0262	00111	1683

C-REF-NO 003	YR 1963	DEPTH 161	WAVES 1 25X2	AIR T 14.4	VIS 8
CONS. NO 028	MONTH 8	MXSAMPD 01	WAVES 2 25X2	WET B 12.2	STN 028
LAT 50-000N	DAY 23	NO.DPTH 9	WND-DIR 260	WW-CODE 02	
LON 64-330W	HR 16.6	W-COLOR 50	WND-SPD 07	CLD-TPE 6	
MARSD SQ 187	C/I 1813	W-TRNSP 08	BARU 1013.7	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND
166	0000	106	30524		2339	14869
174	0010	1082	30526		2335	14878
174	0020	0648	31195		2452	14723
166	0030	0234	31810		2542	14559
166	0050	0068	32153		2580	14493
166	0075	-0031	32493		2612	14456
166	0100	0031	32871		2640	14494
166	0125	0142	33300		2667	14554
166	0150	0233	33614		2686	14603

I N T E R P O L A T E D

DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1060	30524		2339	14869	0000	00000	4504
0010	1082	30526		2335	14878	0045	00002	4539
0020	0648	31195		2452	14723	0085	00008	3430
0030	0234	31810		2542	14559	0116	00016	2569
0050	0068	32153		2580	14493	0164	00035	2204
0075	-0031	32493		2612	14456	0215	00068	1898
0100	0031	32871		2640	14494	0260	00107	1637
0125	0142	33300		2667	14554	0298	00150	1377
0150	0233	33614		2686	14603	0330	00196	1207

C-REF-NO 003	YR 1963	DEPTH	81	WAVES 1 25X2	AIR T 15.3	VIS 8
CONS. NO 029	MONTH 8	MXSAMPD	01	WAVES 2 25X2	WET B 13.7	STN 029
LAT 49-545N	DAY 23	NO.DPTH	6	WND-DIR 260	WW-CODE 03	
LON 64-330W	HR 18.3	W-COLOR		WND-SPD 09	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP	08	BARO 1013.3	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
183	0000	132	30478		2288	14959
183	0010	1127	30467		2323	14894
183	0020	0370	31560		2511	14613
183	0030	0196	31905		2552	14543
183	0049	0047	32167		2582	14483
183	0069	0010	32412		2604	14473

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1320	30478		2288	14959	0000	00000	4987
0010	1127	30467		2323	14894	0048	00002	4657
0020	0370	31560		2511	14613	0086	00008	2867
0030	0196	31905		2552	14543	0113	00015	2470
0050	0022 C	3226 I		2591	14473	0159	00033	2102

C-REF-NO 003 YR 1963 DEPTH 119 WAVES 1 27X2 AIR T 12.2 VIS 7
 CONS. NO 030 MONTH 8 MXSAMPD 01 WAVES 2 25X2 WET B 10.9 STN 030
 LAT 50-012N DAY 23 NO.DPTH 7 WND-DIR 270 W-CODE 03
 LON 63-472W HR 22.7 W-COLOR 30 WND-SPD 06 CLD-TPE 7
 MARSD SQ 187 C/I 1813 W-TRNSP 08 BARO 1014.3 CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
227	0000	125	30358		2292	14934
227	0010	0985	30690		2364	14845
227	0020	0478	31487		2494	14657
227	0030	0293	31722		2530	14583
227	0050	-0004	32194		2587	14460
227	0075	-0005	32675		2626	14471
227	0099	0000	32547		2615	14475

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1250	30358		2292	14934	0000	00000	4948
0010	0985	30690		2364	14845	0046	00002	4264
0020	0478	31487		2494	14657	0083	00007	3024
0030	0293	31722		2530	14583	0112	00015	2680
0050	-0004	32194		2587	14460	0160	00034	2139
0075	-0005	32675		2626	14471	0209	00065	1770
0100	0007	3254 B		2614	14478	0255	00106	1880

C-REF-NO 003	YR 1963	DEPTH 209	WAVES 1 30X1	AIR T 12.4	VIS 8
CONS. NO 031	MONTH 8	MXSAMPD 02	WAVES 2 27X2	WET B 11.5	STN 031
LAT 49-506N	DAY 24	NO.DPTH 10	WND-DIR 300	HW-CODE 01	
LQN 63-025W	HR 02.7	W-COLOR	WND-SPC 02	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 02	BARO 1016.0	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
027	0000	132	30191		2266	14956
036	0010	1363	30166		2256	14971
036	0020	0967	30709		2368	14840
036	0030	0300	31679		2526	14586
036	0050	0066	32128		2578	14491
027	0075	-0074	32714		2632	14439
027	0100	-0040	32720		2631	14459
027	0125	-0022	32921		2646	14475
027	0150	0070	33245		2668	14525
027	0175	0346	34066		2712	14662

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1320	30191		2266	14956	0000	00000	5199
0010	1363	30166		2256	14971	0053	00003	5300
0020	0967	30709		2368	14840	0100	00010	4225
0030	0300	31679		2526	14586	0135	00018	2719
0050	0066	32128		2578	14491	0185	00038	2223
0075	-0074	32714		2632	14439	0235	00069	1712
0100	-0040	32720		2631	14459	0278	00108	1720
0125	-0022	32921		2646	14474	0319	00155	1573
0150	0070	33245		2668	14525	0356	00207	1373
0175	0346	34066		2712	14662	0386	00256	0967

C-REF-NO 003	YR 1963	DEPTH 241	WAVES 1 09X1	AIR T 12.5	VIS 8
CONS. NO 032	MONTH 8	MXSAMPD 02	WAVES 2 29X1	WET B 11.4	STN 032
LAT 49-402N	DAY 24	NO.DPTH 11	WND-DIR 090	WW-CODE 01	
LON 62-189W	HR 07.7	W-COLOR	WND-SPD 07	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP	BARO 1017.1	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
077	0000	135	30417		2278	14969
087	0010	1340	30368		2276	14966
087	0020	1094	30739		2350	14887
087	0030	0214	31796		2542	14550
087	0050	-0014	32193		2587	14456
077	0075	-0090	32499		2615	14429
077	0100	-0068	32737		2633	14447
077	0125	-0031	32986		2652	14471
077	0150	0140	33399		2676	14559
077	0175	0280	33751		2693	14629
077	0199	0402	34184		2716	14691

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1350	30417		2278	14969	0000	00000	5088
0010	1340	30368		2276	14966	0051	00003	5108
0020	1094	30739		2350	14887	0099	00010	4403
0030	0214	31796		2542	14550	0134	00018	2565
0050	-0014	32193		2587	14456	0181	00037	2135
0075	-0090	32499		2615	14429	0232	00069	1871
0100	-0068	32737		2633	14446	0277	00109	1696
0125	-0031	32986		2652	14471	0317	00155	1519
0150	0140	33399		2676	14559	0353	00205	1301
0175	0280	33751		2693	14629	0383	00256	1144
0200	0407	34201		2717	14693	0409	00306	0927

C-REF-NO 003	YR 1963	DEPTH	210	WAVES 1 09X4	AIR T 12.4	VIS 7
CONS. NO 033	MONTH 8	MXSAMPD	02	WAVES 2 09X4	WET B 11.4	STN 033
LAT 49-317N	DAY 24	NO.DPTH	11	WND-DIR 090	WW-CODE 25	
LON 61-453W	HR 12.5	W-COLOR		WND-SPD 10	CLD-TPE 7	
MARSD SQ 151	C/I 1813	W-TRNSP	08	BARO 1020.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
125	0000	134	30792		2308	14970
130	0010	1335	30809		2311	14970
130	0020	0827	31241		2431	14794
130	0030	0055	31997		2568	14481
130	0050	-0045	32285		2596	14443
130	0075	-0082	32545		2618	14433
125	0100	-0097	32772		2637	14433
125	0125	-0039	32967		2651	14467
125	0149	0153	33404		2675	14564
125	0174	0314	33842		2697	14645
125	0198	0387	34178		2717	14685

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1340	30792		2308	14970	0000	00000	4794
0010	1335	30809		2311	14970	0048	00002	4774
0020	0827	31241		2431	14794	0090	00009	3626
0030	0055	31997		2568	14481	0120	00016	2317
0050	-0045	32285		2596	14443	0164	00034	2053
0075	-0082	32545		2618	14433	0213	00065	1839
0100	-0097	32772		2637	14433	0257	00104	1659
0125	-0039	32967		2651	14467	0297	00150	1530
0150	0161	33423		2676	14568	0333	00200	1297
0175	0311	3385 C		2698	14644	0363	00250	1100
0200	0391	34205		2719	14687	0388	00298	0909

C-REF-NO 003	YR 1963	DEPTH 46	WAVES 1 09X2	AIR T 13.3	VIS 7
CONS. NO 034	MONTH 8	MXSAMPD 00	WAVES 2 09X3	WET B 11.7	STN 034
LAT 49-050N	DAY 24	NO.DPTH 5	WND-DIR 090	WW-CODE 02	
LON 61-320W	HR 17.1	W-COLOR 40	WND-SPC 09	CLD-TPE 7	
MARSD SQ 151	C/I 1813	W-TRNSP 10	BARO 1019.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
171	0000	135	30350		2272	14968
171	0010	1347	30335		2272	14968
171	0020	1330	30744		2307	14969
171	0030	1328	30746		2307	14970
171	0040	0731	31201		2441	14759

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1350	30350		2272	14968	CC00	00000	5138
0010	1347	30335		2272	14968	0052	00003	5145
0020	1330	30744		2307	14969	0102	00010	4815
0030	1328	30746		2307	14970	0150	00023	4812

C-REF-NO 003	YR 1963	DEPTH 249	WAVES 1 08X2	AIR T 13.2	VIS 8
CONS. NO 035	MONTH 8	MXSAMPD 02	WAVES 2 08X3	WET B 11.7	STN 035
LAT 48-520N	DAY 24	NO.DPTH 12	WND-DIR 080	WW-CODE 02	
LON 61-550W	HR 19.5	W-COLOR 30	WND-SPD 06	CLD-TPE 7	
MARSD SQ 151	C/I 1813	W-TRNSP 10	BARO 1018.7	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
195	0000	125	30900		2334	14941
208	0010	1234	30911		2338	14937
208	0020	1184	30939		2349	14921
211	0030	0140	31787		2546	14517
211	0049	-0026	32184		2587	14450
211	0074	-0035	32763		2634	14458
195	0100	-0024	32860		2641	14469
195	0125	0023	33063		2655	14497
195	0150	0122	33297		2669	14549
195	0175	0206	33528		2681	14594
195	0200	0369	34031		2707	14675
195	0225	0473	34463		2730	14729

I N T E R P O L A T E D

DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1250	30900		2334	14941	0000	00000	4549
0010	1234	30911		2338	14937	0045	00002	4514
0020	1184	30939		2349	14921	0090	00009	4407
0030	0140	31787		2546	14517	0125	00018	2524
0050	-0029	3221 B		2589	14449	0172	00036	2115
0075	-0035	3277 B		2635	14458	0220	00066	1684
0100	-0024	32860		2641	14469	0261	00103	1619
0125	0023	33063		2655	14497	0300	00148	1486
0150	0122	33297		2669	14549	0336	00199	1366
0175	0206	33528		2681	14594	0369	00254	1251
0200	0369	34031		2707	14675	0398	00308	1017
0225	0473	34463		2730	14729	0421	00358	0805

C-REF-NO 003	YR 1963	DEPTH 412	WAVES 1 09X3	AIR T 12.7	VIS 7
CONS. NO 036	MONTH 8	MXSAMPD 04	WAVES 2 08X4	WET B 12.2	STN 036
LAT 48-382N	DAY 24	NO.DPTH 15	WND-DIR 090	WW-CODE 81	
LON 62-171W	HR 23.7	W-COLOR	WND-SPD 09	CLD-TPE 7	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1017.4	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
237	0000	114	30844		2350	14901
#252	0010	1125	30823		2351	14897
#252	0020	1121	30826		2352	14898
#252	0030	0252	31743		2535	14566
#252	0050	0001	32176		2585	14462
#252	0075	-0066	32449		2610	14439
#252	0100	0048	32843		2636	14501
#245	0124	0103	33206		2662	14535
#245	0149	0227	33560		2682	14599
237	0174	0350	33974		2704	14662
237	0198	0426	34223		2716	14702
#245	0247	0496	34566		2736	14743
#245	0297	0492	34718		2748	14752
#245	0346	0481	34816		2757	14757
#245	0396	0471	34839		2760	14761

#MULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1140	30844		2350	14901	0000	00000	4398
0010	1125	30823		2351	14897	0044	00002	4391
0020	1121	30826		2352	14898	0088	00009	4384
0030	0252	31743		2535	14566	0123	00018	2633
0050	0001	32176		2585	14462	0172	00037	2155
0075	-0066	32449		2610	14439	0223	00069	1918
0100	0048	32843		2636	14501	0268	00109	1667
0125	0107	33220		2663	14538	0307	00154	1415
0150	0232	33577		2683	14602	0340	00201	1234
0175	0354	33986		2705	14664	0369	00248	1034
0200	0431	34241		2717	14704	0393	00295	0922
0225	0476	34438		2728	14730	0416	00343	0827
0250	0497	34579		2737	14744	0435	00391	0748
0300	0491	34726		2749	14752	0470	00490	0638
0400	0470	34838		2760	14761	0530	00701	0541

C-REF-NO 003	YR 1963	DEPTH 344	WAVES 1 08X3	AIR T 13.0	VIS 7
CONS. NO 037	MONTH 8	MXSAMPD 03	WAVES 2 08X4	WET B 11.5	STN 037
LAT 48-258N	DAY 25	NO.DPTH 13	WND-DIR 080	WW-CODE 20	
LON 62-375W	HR 04.6	W-COLOR	WND-SPC 10	CLD-TPE 7	
MARSD SQ 151	C/I 1813	W-TRNSP	BARO 1014.9	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
046	0000	132	30554		2294	14960
054	0010	1310	30558		2296	14958
054	0020	1317	30577		2296	14963
054	0030	0265	30577		2441	14556
054	0050	-0013	32097		2579	14455
054	0074	-0048	32517		2615	14448
054	0099	-0090	32845		2643	14438
046	0124	-0023	32017		2573	14461
046	0149	0136	33327		2670	14556
046	0174	0281	33728		2691	14629
046	0199	0363	34012		2706	14672
050	0248	0480	34478		2731	14736
050	0297	0489	34736		2750	14751

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1320	30554		2294	14960	0000	00000	4931
0010	1310	30558		2296	14958	0049	00003	4912
0020	1317	30577		2296	14963	0099	00010	4913
0030	0265	30577		2441	14556	0141	00021	3527
0050	-0013	32097		2579	14455	0199	00043	2209
0075	-0051	3254 B		2617	14448	0250	00075	1852
0100	-0089	3280 G		2639	14437	0294	00114	1638
0125	-0017	3206 G		2576	14465	0343	00171	2234
0150	0143	3335 B		2672	14559	0388	00233	1337
0175	0285	33741		2692	14631	0419	00285	1156
0200	0366	34023		2707	14674	0446	00338	1020
0225	0435	3428 B		2720	14711	0471	00390	0901
0250	0475 B	3448 C		2731	14734	0492	00443	0798
0300	0487	34747		2751	14751	0528	00542	0617

C-REF-NO 003	YR 1963	DEPTH	55	WAVES 1 07X3	AIR T 13.0	VIS 8
CONS. NO 038	MONTH 8	MXSAMPD	00	WAVES 2 08X4	WET B 11.5	STN 038
LAT 48-247N	DAY 25	NO.DPTH	5	WND-DIR 070	WW-CODE 02	
LON 63-082W	HR 09.0	W-COLOR		WND-SPD 12	CLD-TPE 7	
MARSD SQ 151	C/I 1813	W-TRNSP	05	BARO 1011.8	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
090	0000	117	30455		2314	14907
090	0010	1158	30442		2315	14904
090	0019	1145	30445		2318	14901
090	0029	0290	31684		2527	14582
090	0048	-0004	32393		2603	14463

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1170	30455		2314	14907	0000	00000	4737
0010	1158	30442		2315	14904	0048	00002	4728
0020	1069 E	3055 F		2340	14875	0094	00009	4499
0030	0584 I	3129 I		2466	14700	0133	00019	3289

C-REF-NO 003	YR 1963	DEPTH 115	WAVES 1 06X3	AIR T 11.9	VIS 6
CONS. NO 039	MONTH 8	MXSAMPD 01	WAVES 2 09X5	WET B 11.6	STN 039
LAT 48-244N	DAY 25	NO.DPTH 7	WND-DIR 060	WW-CODE 62	
LON 63-398W	HR 11.6	W-COLOR 50	WND-SPD 12	CLD-TPE 7	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1011.3	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
116	0000	120	30135		2284	14914
116	0010	1198	30129		2284	14915
116	0020	1005	30287		2329	14849
116	0030	0443	31511		2500	14645
116	0050	0069	31987		2567	14491
116	0075	-0022	32388		2603	14459
116	0100	0008	32775		2633	14482

I N T E R P O L A T E D

DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1200	30135		2284	14914	0000	00000	5025
0010	1198	30129		2284	14915	0050	00003	5028
0020	1005	30287		2329	14849	0099	00010	4596
0030	0443	31511		2500	14645	0137	00019	2972
0050	0069	31987		2567	14491	0190	00040	2332
0075	-0022	32388		2603	14459	0244	00075	1982
0100	0008	32775		2633	14482	0291	00116	1699

C-REF-NO 003	YR 1963	DEPTH 307	WAVES 1 04X2	AIR T 14.4	VIS 7
CONS. NO 040	MONTH 8	MXSAMPD 03	WAVES 2 08X4	WET B 12.2	STN 040
LAT 49-017N	DAY 26	NO.DPTH 13	WND-DIR 360	WW-CODE 01	
LON 64-140W	HR 16.3	W-COLOR 40	WND-SPD 03	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 06	BARO 1013.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
163	0000	119	28685		2174	14892
169	0010	1175	29038		2204	14893
169	0020	1054	29800		2284	14861
169	0030	0422	31388		2492	14634
169	0050	0014	32074		2576	14467
169	0075	-0059	32443		2609	14442
169	0100	-0034	32768		2634	14463
163	0122	0073	33187		2663	14521
163	0147	0208	33536		2682	14590
163	0171	0314				
163	0196	0371	34109		2713	14677
163	0244	0452	34486		2734	14724
163	0274	0467	34593		2741	14736

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1190	28685		2174	14892	0000	00000	6080
0010	1175	29038		2204	14893	0060	00003	5795
0020	1054	29800		2284	14861	0114	00011	5034
0030	0422	31388		2492	14634	0154	00021	3045
0050	0014	32074		2576	14467	0208	00042	2238
0075	-0059	32443		2609	14442	0260	00075	1925
0100	-0034	32768		2634	14463	0305	00115	1685
0125	0089	33233		2666	14530	0344	00160	1394
0150	0223	33576		2684	14598	0377	00206	1228
0175	0325	33884		2699	14651	0406	00254	1084
0200	0380	34149		2715	14681	0432	00303	0939
0225	0426	34363		2727	14708	0454	00352	0829
0250	0454	3451 B		2736	14726	0474	00400	0753

C-REF-NO 003	YR 1963	DEPTH 366	WAVES 1 36X1	AIR T 11.6	VIS 8
CONS. NO 041	MONTH 8	MXSAMPD 03	WAVES 2 08X3	WET B 10.3	STN 041
LAT 49-075N	DAY 26	NO.DPTH 14	WND-DIR 290	WW-CCDE 01	
LON 64-045W	HR 18.7	W-COLOR	WND-SPD 03	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP	BARO 1013.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
187	0000	108	29650		2268	14865
203	0010	1031	29723		2281	14850
203	0020	0407	31627		2512	14629
203	0030	0191	31896		2552	14541
203	0050	-0033	32138		2584	14446
203	0075	-0038	32574		2619	14454
197	0096	-0019	32837		2639	14470
197	0120	0075	33153		2660	14521
187	0150	0163	33420		2676	14569
187	0175	0299	33825		2697	14638
197	0193	0369	34075		2710	14675
197	0241	0446	34421		2730	14720
197	0288	0473	34680		2747	14742
197	0347	0476	34717		2750	14754

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1080	29650		2268	14865	0000	00000	5183
0010	1031	29723		2281	14850	0051	00003	5053
0020	0407	31627		2512	14629	0091	00008	2850
0030	0191	31896		2552	14541	0118	00015	2474
0050	-0033	32138		2584	14446	0165	00034	2170
0075	-0038	32574		2619	14454	0215	00065	1833
0100	-0005	32892		2643	14478	0258	00104	1603
0125	0088	3319 C		2662	14528	0296	00148	1423
0150	0163	33420		2676	14569	0331	00196	1301
0175	0299	33825		2697	14638	0361	00246	1105
0200	0387	3414 C		2714	14684	0387	00296	0951
0225	0432	3434 E		2725	14710	0410	00345	0855
0250	0454	34482		2734	14725	0430	00395	0773
0300	0482	3469 E		2747	14748	0466	00496	0656

C-REF-NO 003	YR 1963	DEPTH 366	WAVES 1 31X1	AIR T 12.6	VIS 8
CONS. NO 042	MONTH 8	MXSAMPD 03	WAVES 2 09X3	WET B 11.5	STN 042
LAT 49-126N	DAY 26	NO.DPTH 14	WND-DIR 310	WW-CODE 03	
LON 63-544W	HR 22.2	W-COLOR 30	WND-SPD 05	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 06	BARO 1013.9	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
222	0000	110	30075		2297	14877
233	0010	1074	30166		2309	14871
233	0020	0907	30338		2349	14813
233	0030	0216	31835		2545	14551
233	0050	0006	32136		2582	14464
233	0075	-0056	32502		2614	14445
233	0100	-0041	32776		2635	14460
233	0125	0002	32969		2649	14486
222	0148	0080	33177		2662	14528
222	0172	0268	33721		2692	14623
222	0197	0358	34025		2708	14670
222	0246	0474	34543		2736	14734
222	0296	0486	34725		2749	14749
222	0345	0477	34801		2757	14755

I N T E R P O L A T E D

DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1100	30075		2297	14877	0000	00000	4901
0010	1074	30166		2309	14871	0049	00002	4793
0020	0907	30338		2349	14813	0095	00009	4411
0030	0216	31835		2545	14551	0130	00018	2537
0050	0006	32136		2582	14464	0177	00037	2187
0075	-0056	32502		2614	14445	0229	00069	1881
0100	-0041	32776		2635	14460	0273	00109	1676
0125	0002	32969		2649	14486	0314	00156	1547
0150	0095	3322 C		2664	14536	0351	00208	1407
0175	0282	3377 B		2694	14630	0383	00261	1135
0200	0368	34063		2710	14675	0410	00312	0992
0225	0436	3435 C		2725	14712	0433	00363	0850
0250	0477	34566		2738	14736	0453	00411	0736
0300	0501 B	3478 I		2752	14757	0487	00507	0611

C-REF-NO 003	YR 1963	DEPTH 282	WAVES 1 00X0	AIR T 12.5	VIS 8
CONS. NO 043	MONTH 8	MXSAMPD 02	WAVES 2 09X2	WET B 11.6	STN 043
LAT 49-184N	DAY 27	NO.DPTH 12	WND-DIR 250	WW-CODE 02	
LOX 63-445W	HR 01.2	W-COLOR	WND-SPD 02	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 05	BARO 1015.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
012	0000	106	30254		2318	14865
019	0010	0996	30353		2336	14845
019	0020	0510	31146		2464	14666
019	0030	0152	31910		2556	14524
019	0050	-0008	32154		2584	14458
019	0075	-0052	32459		2610	14446
019	0100	-0035	32811		2638	14463
012	0125	0040	33064		2655	14505
012	0150	0145	33356		2672	14560
012	0175	0251	33693		2691	14616
012	0200	0381	34169		2717	14682
012	0250	0476	34626		2743	14736

#WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1060	30254		2318	14865	0000	00000	4704
0010	0996	30353		2336	14845	0046	00002	4531
0020	0510	31146		2464	14666	0086	00008	3313
0030	0152	31910		2556	14524	0115	00015	2438
0050	-0008	32154		2584	14458	0161	00034	2168
0075	-0052	32459		2610	14446	0212	00066	1916
0100	-0035	32811		2638	14463	0257	00106	1652
0125	0040	33064		2655	14505	0297	00152	1494
0150	0145	33356		2672	14560	0333	00202	1337
0175	0251	33693		2691	14616	0364	00254	1163
0200	0381	34169		2717	14682	0390	00304	0925
0225	0431 C	3439 I		2729	14710	0412	00352	0818
0250	0476	34626		2743	14736	0431	00398	0689

C-REF-NO 003	YR 1963	DEPTH	35	WAVES 1 00X0	AIR T 11.6	VIS 7
CONS. NO 044	MONTH 8	MXSAMPD	00	WAVES 2 09X2	WET B 11.0	STN 044
LAT 49-227N	DAY 27	NC.DPTH	4	WND-DIR 100	WW-CODE 80	
LON 63-380W	HR 03.4	W-COLOR		WND-SPC 02	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP	06	BARO 1015.2	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
034	0000	108	30851		2361	14880
034	0008	1082	30834		2359	14882
034	0018	1022	30883		2373	14862
034	0028	0948	30948		2390	14837

#WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1080	30851		2361	14880	0000	00000	4294
0010	1073	30840		2361	14879	0043	00002	4293
0020	1018 B	3088 B		2374	14861	0086	00009	4172

C-REF-NO 003	YR 1963	DEPTH 208	WAVES 1 00X0	AIR T 12.8	VIS 8
CONS. NO 045	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 12.0	STN 045
LAT 49-180N	DAY 27	NO.DPTH 11	WND-DIR 040	WW-CODE 02	
LON 67-225W	HR 20.2	W-COLOR 70	WND-SPD 01	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 06	BARO 1018.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
202	0000	110	27819	667	2122	14849
221	0010	0937	28200	735	2178	14795
214	0020	0517	30863	421	2441	14665
214	0030	0368	31232	427	2485	14609
214	0050	0165	31848	501	2550	14532
202	0075	0052	32147	625	2580	14489
202	0100	-0010	32584	562	2618	14471
202	0125	0092	33048	455	2650	14528
202	0150	0234	33643	345	2688	14604
202	0175	0336	34024	288	2710	14657
202	0200	0371	34144	267	2716	14678

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1100	27819		2122	14849	0000	00000	6574
0010	0937	28200		2178	14795	0063	00003	6045
0020	0517	30863		2441	14665	0111	00010	3533
0030	0368	31232		2485	14609	0145	00018	3113
0050	0165	31848		2550	14532	0201	00041	2493
0075	0052	32147		2580	14489	0260	00078	2200
0100	-0010	32584		2618	14471	0311	00123	1836
0125	0092	33048		2650	14528	0353	00172	1536
0150	0234	33643		2688	14604	0388	00219	1186
0175	0336	34024		2710	14657	0415	00265	0989
0200	0371	34144		2716	14678	0439	00311	0934

C-REF-NO 003	YR 1963	DEPTH 289	WAVES 1 00X0	AIR T 13.9	VIS 8
CONS. NO 046	MONTH 8	MXSAMPD 03	WAVES 2 00X0	WET B 13.0	STN 046
LAT 49-169N	DAY 27	NO.DPTH 13	WNC-DIR CALM	WW-CODE 02	
LON 67-227W	HR 21.9	W-COLOR 50	WNO-SPD 00	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 05	BARO 1018.1	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
219	0000	111	27870	590	2125	14853
231	0010	0863	28144	625	2184	14766
219	0025	0538	30705	527	2426	14673
231	0030	0438	31003	601	2460	14636
219	0050	0201	31695	544	2535	14546
219	0075	0004	32220	597	2589	14469
219	0100	-0024	32519	603	2614	14464
231	0123	0061	32984	461	2647	14513
219	0150	0162	33388	379	2673	14568
219	0170	0258	33739	313	2694	14619
231	0197	0343	34063	260	2712	14664
231	0246	0426	34387	228	2729	14712
231	0266	0444				

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1110	27870		2125	14853	0000	00000	6552
0010	0863	28144		2184	14766	0063	00003	5983
0020	0641	2985 I		2346	14703	0115	00011	4432
0030	0438	31003		2460	14636	0154	00020	3350
0050	0201	31695		2535	14546	0214	00044	2633
0075	0004	32220		2589	14468	0274	00082	2121
0100	-0024	32519		2614	14464	0325	00127	1880
0125	0068	33015		2649	14517	0368	00176	1547
0150	0162	33388		2673	14568	0404	00226	1324
0175	0277	33809		2698	14629	0434	00277	1097
0200	0350	3411 D		2715	14668	0460	00326	0940
0225	0399	3431 B		2726	14696	0482	00375	0843
0250	0433							

C-REF-NO 003	YR 1963	DEPTH 326	WAVES 1 00X0	AIR T 11.8	VIS 8
CONS. NO 047	MONTH 8	MXSAMPD 03	WAVES 2 00X0	WET B 10.3	STN 047
LAT 49-131N	DAY 28	NO.DPTH 13	WNU-DIR CALM	WW-CODE 02	
LON 67-196W	HR 00.1	W-COLOR 30	WNU-SPD 00	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1018.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
001	0000	105	27636	693	2116	14829
007	0010	0925	27940	708	2159	14787
007	0020	0537	29076	560	2298	14650
007	0030	0438	30444	635	2416	14628
007	0050	0176	31725	688	2539	14535
007	0075	-0013	32305	689	2596	14462
007	0100	0006	32741	593	2630	14481
001	0123	0068	33037	473	2651	14517
001	0148	0136	33273	431	2666	14555
001	0172	0254	33696	342	2691	14617
001	0197	0346	34031	269	2709	14665
001	0246	0425	34360	236	2727	14711
001	0295	0462	34586	235	2741	14737

I N T E R P O L A T E D

DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1050	27636		2116	14829	0000	00000	6631
0010	0925	27940		2159	14787	0064	00003	6221
0020	0537	29076		2298	14650	0120	00011	4898
0030	0438	30444		2416	14628	0164	00022	3771
0050	0176	31725		2539	14535	0228	00047	2594
0075	-0013	32305		2596	14462	0286	00084	2049
0100	0006	32741		2630	14481	0334	00126	1724
0125	0072	3305 B		2652	14519	0374	00173	1520
0150	0145	3331 B		2668	14560	0411	00224	1374
0175	0267	33742		2693	14623	0443	00276	1139
0200	0353	34059		2711	14669	0469	00327	0981
0225	0402	3425 E		2721	14696	0493	00378	0887
0250	0444 B	3443 I		2731	14720	0514	00430	0798

C-REF-NO 003	YR 1963	DEPTH 333	WAVES 1 00X0	AIR T 11.7	VIS 8
CONS. NO 048	MONTH 8	MXSAMPD 03	WAVES 2 00X0	WET B 11.2	STN 048
LAT 49-092N	DAY 28	NO.DPTH 14	WND-DIR 300	WW-CODE 02	
LON 67-173W	HR 01.5	W-COLOR	WND-SPD 01	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1018.5	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
015	0000	108	27705	706	2117	14840
025	0010	0877	28048	416	2175	14771
025	0020	0482	29342	307	2324	14631
025	0030	0413	30544	526	2426	14619
025	0050	0117	31973	539	2563	14512
025	0075	-0009	32354	503	2600	14464
025	0100	0002	32652	489	2623	14478
015	0124	0054	32956	497	2645	14510
015	0150	0109	33179	452	2660	14542
015	0174	0221	33554	371	2682	14601
015	0199	0305	33886	288	2701	14646
015	0248	0421	34337	228	2726	14709
015	0298	0465	34599	232	2742	14739
015	0322	0464				

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1080	27705		2117	14840	0000	00000	6627
0010	0877	28048		2175	14771	0064	00003	6074
0020	0482	29342		2324	14631	0117	00011	4644
0030	0413	30544		2426	14619	0159	00021	3673
0050	0117	31973		2563	14512	0220	00045	2369
0075	-0009	32354		2600	14464	0275	00080	2013
0100	0002	32652		2623	14478	0323	00122	1790
0125	0055	32964		2646	14511	0365	00171	1579
0150	0109	33179		2660	14542	0403	00224	1447
0175	0225	33569		2683	14603	0437	00280	1235
0200	0308	33897		2702	14647	0466	00336	1060
0225	0375	34154		2716	14684	0491	00390	0933
0250	0424	3436 C		2728	14711	0514	00444	0829
0300	0467							

C-REF-NO 003	YR 1963	DEPTH 329	WAVES 1 00X0	AIR T 11.2	VIS 8
CONS. NO 049	MONTH 8	MXSAMPD 03	WAVES 2 00X0	WET B 10.8	STN 049
LAT 49-055N	DAY 28	NO.DPTH 14	WND-DIR 240	WW-CODE 01	
LON 67-156W	HR 03.3	W-COLOR 00	WND-SPD 02	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1018.4	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
033	0000	098	27520	674	2118	14801
041	0010	0720	28429	426	2226	14714
041	0020	0476	29277	421	2320	14627
041	0030	0318	30346	428	2419	14576
041	0050	0131	31881	462	2555	14517
041	0075	-0011	32399	445	2604	14464
041	0100	-0004	32714	393	2629	14476
033	0125	0035	32933	451	2644	14501
033	0150	0079	33116	480	2657	14527
033	0175	0201	33508	373	2680	14591
033	0200	0276	33768	311	2695	14632
033	0250	0422	34367	222	2728	14710
033	0299	0465	34595	228	2742	14739
033	0324	0463				

#WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0980	27520		2118	14801	0000	00000	6613
0010	0720	28429		2226	14714	0061	00003	5587
0020	0476	29277		2320	14627	0113	00011	4687
0030	0318	30346		2419	14576	0155	00021	3742
0050	0131	31881		2555	14517	0217	00045	2447
0075	-0011	32399		2604	14464	0273	00080	1978
0100	-0004	32714		2629	14476	0320	00122	1740
0125	0035	32933		2644	14501	0362	00170	1591
0150	0079	33116		2657	14527	0400	00224	1476
0175	0201	33508		2680	14591	0435	00281	1263
0200	0276	33768		2695	14632	0465	00339	1129
0225	0356	3408 G		2712	14674	0491	00396	0966
0250	0422	34367		2728	14710	0514	00451	0824
0300	0469							

C-REF-NO 003	YR 1963	DEPTH 241	WAVES 1 00X0	AIR T 11.7	VIS 8
CONS. NO 050	MCNTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 10.6	STN 050
LAT 49-010N	DAY 28	NO.DPTH 12	WND-DIR 250	WW-CODE 01	
LQN 67-120W	HR 05.0	W-COLOR	WND-SPD 04	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP	BARO 1018.0	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
050	0000	134	29130	421	2180	14949
057	0010	1167	29234	555	2220	14892
057	0020	0773	29779	513	2324	14754
057	0030	0379	30587	481	2433	14605
057	0050	0137	31909	526	2556	14520
057	0075	-0010	32280	488	2594	14463
050	0100	0007	32637	369	2622	14480
050	0125	0068	32991	343	2647	14517
050	0150	0191	33462	326	2677	14582
050	0175	0264	33734	285	2693	14622
050	0200	0330		240		
050	0225	0396		151		

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1340	29130		2180	14949	0000	00000	6018
0010	1167	29234		2220	14892	0058	00003	5636
0020	0773	29779		2324	14754	0110	00011	4644
0030	0379	30587		2433	14605	0151	00021	3610
0050	0137	31909		2556	14520	0212	00045	2429
0075	-0010	32280		2594	14463	0269	00080	2069
0100	0007	32637		2622	14480	0318	00123	1804
0125	0068	32991		2647	14517	0360	00172	1565
0150	0191	33462		2677	14582	0396	00222	1289
0175	0264	33734		2693	14622	0427	00273	1143
0200	0330							
0225	0396							

C-REF-NO 003	YR 1963	DEPTH 148	WAVES 1 00X0	AIR T 10.9	VIS 9
CONS. NO 051	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B 10.2	STN 051
LAT 48-595N	DAY 28	NO.DPTH 8	WND-DIR 210	WW-CODE 01	
LON 67-110W	HR 06.4	W-COLOR	WND-SPD 02	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP	BARO 1018.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
064	0000	101	28274	607	2172	14822
064	0010	0897	29010	483	2247	14791
064	0020	0435	29575	417	2347	14614
064	0030	0372	30474	426	2424	14601
064	0050	0202	31631	459	2530	14546
064	0075	0029	32265	481	2591	14481
064	0100	0022	32710	409	2627	14488
064	0125	0083	33083	330	2654	14525

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1010	28274		2172	14822	0000	00000	6096
0010	0897	29010		2247	14790	0058	00003	5384
0020	0435	29575		2347	14614	0107	00010	4424
0030	0372	30474		2424	14601	0148	00020	3689
0050	0202	31631		2530	14546	0212	00045	2683
0075	0029	32265		2591	14481	0272	00083	2099
0100	0022	32710		2627	14488	0320	00126	1755
0125	0083	33083		2654	14525	0361	00173	1504

C-REF-NO 003	YR 1963	DEPTH 106	WAVES 1 00X0	AIR T 10.3	VIS 9
CONS. NO 052	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B 09.3	STN 052
LAT 48-585N	DAY 28	NO.DPTH 7	WND-DIR 200	WW-CODE 02	
LON 67-099W	HR 07.2	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP	BARO 1017.9	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
072	0000	098	28202	405	2171	14810
072	0010	0774	28426	433	2218	14735
072	0020	0435	29758	387	2362	14616
072	0030	0336	30482	397	2428	14585
072	0050	0218	31633	389	2529	14553
072	0075	0012	32327	371	2597	14474
072	0095	0005	32536	337	2614	14477

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0980	28202		2171	14810	0000	00000	6105
0010	0774	28426		2218	14735	0059	00003	5656
0020	0435	29758		2362	14616	0109	00010	4286
0030	0336	30482		2428	14585	0149	00020	3653
0050	0218	31633		2529	14553	0213	00045	2692
0075	0012	32327		2597	14474	0272	00082	2043

C-REF-NO 003	YR 1963	DEPTH 73	WAVES 1 21X1	AIR T 10.5	VIS 9
CONS. NO 053	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B 09.4	STN 053
LAT 48-580N	DAY 28	NO.DPTH 6	WND-DIR 190	WW-CODE 02	
LON 67-094W	HR 08.1	W-COLOR 00	WND-SPD 06	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 02	BARO 1017.9	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
081	0000	083	28154	667	2190	14752
081	0010	0770	28382	560	2215	14733
081	0020	0431	29681	563	2356	14614
081	0030	0310	30520	540	2433	14575
081	0050	0145	31748	597	2543	14522
081	0070	0052	32147	563	2580	14489

I N T E R P O L A T E D

DEPTH	T E M P	S A L	CXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0830	28154		2190	14752	0000	00000	5931
0010	0770	28382		2215	14733	0058	00003	5684
0020	0431	29681		2356	14614	0109	00010	4340
0030	0310	30520		2433	14575	0148	00020	3604
0050	0145	31748		2543	14522	0210	00045	2557

C-REF-NO 003	YR 1963	DEPTH 338	WAVES 1 22X1	AIR T 13.6	VIS 7
CONS. NO 054	MONTH 8	MXSAMPD 03	WAVES 2 00X0	WET B 12.2	STN 054
LAT 48-161N	DAY 28	NO.DPTH 14	WND-DIR 240	WW-CODE 03	
LON 69-239W	HR 20.4	W-COLOR 50	WND-SPD 08	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1013.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
204	0000	099	27565	766	2120	14806
214	0010	0876	27759	805	2152	14767
214	0020	0590	29107	646	2294	14672
214	0030	0560	29629	631	2339	14668
214	0050	0343	30277	568	2411	14589
214	0075	0046	32038	644	2572	14485
214	0100	-0015	32423	622	2606	14467
214	0125	0030	32799	508	2634	14497
204	0140	0247	33679	340	2690	14608
204	0164	0310	33919	288	2704	14643
204	0187	0359	34086	241	2712	14670
204	0234	0378	34215	228	2721	14687
204	0280	0419	34380	197	2730	14714
204	0304	0441	34453	200	2733	14728

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0990	27565		2120	14806	0000	00000	6594
0010	0876	27759		2152	14767	0065	00003	6288
0020	0590	29107		2294	14672	0121	00011	4930
0030	0560	29629		2339	14668	0168	00023	4507
0050	0343	30277		2411	14589	0252	00057	3815
0075	0046	32038		2572	14485	0328	00104	2280
0100	-0015	32423		2606	14467	0382	00151	1957
0125	0030	32799		2634	14497	0428	00203	1691
0150	0295 D	3387 I		2701	14633	0462	00251	1066
0175	0336	34007		2708	14657	0488	00295	1001
0200	0369	3413 D		2715	14676	0513	00341	0939
0225	0378	3420 C		2719	14685	0536	00392	0901
0250	0391	34272		2724	14696	0558	00446	0862
0300	0437	34439		2732	14726	0600	00563	0790

C-REF-NO 003	YR 1963	DEPTH 152	WAVES 1 21X1	AIR T 11.1	VIS 7
CONS. NO 055	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B 10.0	STN 055
LAT 48-097N	DAY 28	NO.DPTH 9	WND-DIR 210	WW-CODE 21	
LON 69-336W	HR 23.1	W-COLOR 30	WND-SPD 06	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP 04	BARO 1012.8	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
231	0000	075	27536	691	2152	14713
*240	0010	0736	28725	818	2247	14724
*240	0020	0287	30575	631	2439	14564
*240	0030	0194	31212	568	2497	14533
*240	0049	0023	32139	668	2581	14472
231	0074	-0010	32513	560	2613	14466
231	0100	0049	32912	510	2642	14503
231	0124	0203	33518	356	2681	14584
*240	0139	0292	33862	290	2701	14630

*MULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0750	27536		2152	14713	0000	00000	6292
0010	0736	28725		2247	14724	0059	00003	5385
0020	0287	30575		2439	14564	0103	00009	3544
0030	0194	31212		2497	14533	0136	00017	2995
0050	0019	3216 B		2583	14470	0188	00038	2173
0075	-0010	32526		2614	14466	0239	00070	1882
0100	0049	32912		2642	14503	0283	00109	1615
0125	0196 B	3351 H		2680	14581	0319	00150	1259

C-REF-NO 003	YR 1963	DEPTH	97	WAVES 1 00X0	AIR T 14.1	VIS 7
CONS. NO 056	MONTH 8	MXSAMPD	01	WAVES 2 00X0	WET B 11.7	STN 056
LAT 48-073N	DAY 29	NO.DPTH	7	WND-DIR 220	WW-CODE 02	
LON 69-415W	HR 01.3	W-COLOR	00	WND-SPD 07	CLD-TPE 6	
MARSD SQ 151	C/I 1813	W-TRNSP	03	BARO 1012.9	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
013	0000	114	15940	670	1198	14718
017	0010	0687	26329	683	2065	14674
013	0019	0663	26946	688	2116	14674
013	0029	0581	28401	668	2240	14661
013	0048	0553	29134	680	2300	14662
013	0073	0535	29328	667	2318	14661
013	0097	0532				

#WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1140	15940		1198	14718	0000	00000	15516
0010	0687	26329		2065	14674	0113	00004	7125
0020	0655	2709 H		2128	14672	0181	00014	6518
0030	0577	2848 F		2246	14660	0241	00029	5390
0050	0551	2958 I		2336	14667	0341	00069	4534
0075	0533							

C-REF-NO 003	YR 1963	DEPTH 247	WAVES 1 00X0	AIR T 18.5	VIS 7
CONS. NO 057	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 14.0	STN 057
LAT 48-083N	DAY 29	NO.DPTH 12	WND-DIR CALM	WW-CODE 02	
LON 69-460W	HR 02.9	W-COLOR	WND-SPD 00	CLD-TPE X	
MARSD SQ 151	C/I 1813	W-TRNSP 02	BARO 1012.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
029	0000	128	13650	647	1001	14742
036	0010	0673	27280	686	2141	14680
036	0020	0605	28492	632	2244	14670
036	0030	0576	28905	646	2280	14665
036	0050	0533	29308	578	2316	14656
036	0075	0518	29372	596	2323	14655
029	0099	0461	29625	566	2349	14638
029	0123	0448	29685	591	2355	14638
029	0148	0417	29786	620	2366	14630
029	0172	0410	29826	624	2369	14632
029	0197	0412	29832	543	2370	14637
029	0226	0408				

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1280	13650		1001	14742	0000	00000	17448
0010	0673	27280		2141	14680	0119	00003	6395
0020	0605	28492		2244	14670	0178	00012	5409
0030	0576	28905		2280	14665	0231	00025	5068
0050	0533	29308		2316	14656	0329	00065	4721
0075	0518	29372		2323	14655	0447	00140	4659
0100	0460	29629		2349	14638	0560	00242	4409
0125	0445	29693		2356	14637	0670	00368	4348
0150	0416	29791		2366	14630	0778	00520	4247
0175	0410	29833		2370	14632	0885	00696	4211
0200	0409							
0225	0408							

C-REF-NO 003	YR 1963	DEPTH 165	WAVES 1 00X0	AIR T 15.6	VIS 7
CONS. NO 058	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B 14.4	STN 058
LAT 48-131N	DAY 29	NO.DPTH 9	WND-DIR CALM	WW-CODE 02	
LON 69-532W	HR 05.1	W-COLOR	WND-SPD 00	CLO-TPE X	
MARSD SQ 151	C/I 1813	W-TRNSP	BARO 1010.9	CLO-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
051	0000	137	11050	575	0787	14744
059	0010	0740	23152	438	1810	14654
059	0020	0396	28475	419	2264	14583
059	0030	0381	29204	488	2323	14588
059	0050	0360	29420	468	2342	14585
051	0075	0342	29458	494	2346	14582
051	0100	0334	29612	460	2359	14584
051	0125	0320	29721	441	2369	14584
051	0150	0296				

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1370	11050		0787	14744	0000	00000	19551
0010	0740	23152		1810	14654	0145	00005	9577
0020	0396	28475		2264	14583	0219	00015	5222
0030	0381	29204		2323	14588	0268	00027	4657
0050	0360	29420		2342	14585	0360	00065	4477
0075	0342	29458		2346	14582	0472	00136	4434
0100	0334	29612		2359	14584	0582	00234	4311
0125	0320	29721		2369	14584	0689	00357	4217
0150	0296							

C-REF-NO 003	YR 1963	DEPTH 199	WAVES 1 00X0	AIR T 14.4	VIS 7
CONS. NO 059	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 13.9	STN 059
LAT 48-152N	DAY 29	NO.DPTH 11	WND-DIR	WW-CODE 80	
LON 70-046W	HR 07.4	W-COLOR	WND-SPD	CLD-TPE X	
MARSD SQ 152	C/I 1813	W-TRNSP	BARO 1010.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	146	08150	636	0550	14742
080	0010	0770	21426	623	1672	14645
080	0020	0371	28116	585	2237	14567
080	0030	0337	28638	582	2281	14561
080	0050	0294	29249	582	2333	14554
074	0075	0311	29556	426	2356	14569
074	0100	0302	29693	445	2368	14571
074	0125	0286	29882	480	2384	14571
074	0150	0249	30133	317	2407	14562
074	0175	0168	30485	438	2441	14535
074	0190	0121	30687	382	2460	14520.

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1460	08150		0550	14742	0000	00000	21892
0010	0770	21426		1672	14644	0163	00005	10913
0020	0371	28116		2237	14567	0245	00017	5473
0030	0337	28638		2281	14561	0297	00030	5051
0050	0294	29249		2333	14554	0394	00069	4555
0075	0311	29556		2356	14569	0505	00140	4335
0100	0302	29693		2368	14571	0613	00235	4224
0125	0286	29882		2384	14571	0717	00355	4069
0150	0249	30133		2407	14562	0817	00495	3851
0175	0168	30485		2441	14535	0909	00648	3528

C-REF-NO 003	YR 1963	DEPTH	271	WAVES 1 00X0	AIR T	14.2	VIS	7
CONS. NO 060	MONTH 8	MXSAMPD	02	WAVES 2 00X0	WET B	13.6	STN	060
LAT 48-178N	DAY 29	NO.DPTH	12	WND-DIR	WW-CODE	58		
LON 70-147W	HR 09.4	W-COLOR	20	WND-SPD	CLD-TPE	5		
MARSD SQ 152	C/I 1813	W-TRNSP	01	BARO 1009.7	CLD-AMT	8	HW	

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
094	0000	145	09060	638	0621	14749
101	0010	0697	24675	567	1934	14657
101	0020	0366	28083	558	2235	14565
101	0030	0288	28645	511	2286	14540
101	0050	0225	29159	525	2331	14522
101	0075	0294	29508	515	2354	14561
094	0099	0314	29698	529	2367	14577
094	0124	0291	29876	512	2383	14573
094	0149	0245	30192	528	2412	14561
094	0174	0076	30384	480	2438	14492
094	0199	0100	30692	452	2461	14512
094	0249	0092	30743	441	2466	14517

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1450	09060		0621	14749	0000	00000	21185
0010	0697	24675		1934	14657	0147	00004	8381
0020	0366	28083		2235	14565	0216	00014	5494
0030	0288	28645		2286	14540	0269	00027	5009
0050	0225	29159		2331	14522	0365	00066	4576
0075	0294	29508		2354	14561	0477	00137	4358
0100	0314	29704		2368	14577	0585	00234	4225
0125	0291	29889		2384	14573	0689	00353	4067
0150	0238	30200		2413	14558	0788	00492	3792
0175	0075	30397		2439	14492	0880	00644	3541
0200	0046 I	3062 I		2458	14486	0967	00811	3354
0225	0040 F	3072 I		2466	14489	1050	00992	3276
*0250	0095	30743		2465	14518	1133	01193	3286

C-REF-NO 003	YR 1963	DEPTH 267	WAVES 1 00X0	AIR T 13.9	VIS 6
CONS. NO 061	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 13.8	STN 061
LAT 48-212N	DAY 29	NO.DPTH 12	WND-DIR 110	WW-CODE 58	
LOX 70-229W	HR 11.4	W-COLOR	WND-SPD 02	CLD-TPE 7	
MARSD SQ 152	C/I 1813	W-TRNSP 02	BARO 1008.9	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
114	0000	144	08700	612	0595	14741
121	0010	0635	25571	524	2011	14643
121	0020	0354	27889	576	2221	14557
121	0030	0241	28600	593	2285	14518
121	0050	0185	29124	517	2331	14504
121	0075	0224	29465	584	2356	14530
114	0100	0296	29732	555	2372	14569
114	0125	0277	29904	580	2387	14568
114	0150	0190	30152	549	2413	14537
114	0175	0063	30395	549	2439	14487
114	0200	0083	30708	534	2463	14504
114	0250	0090	30797	516	2470	14517

#WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1440	08700		0595	14741	0000	00000	21442
0010	0635	25571		2011	14643	0145	00004	7640
0020	0354	27889		2221	14557	0211	00013	5632
0030	0241	28600		2285	14518	0264	00027	5012
0050	0185	29124		2331	14504	0361	00066	4578
0075	0224	29465		2356	14530	0473	00137	4342
0100	0296	29732		2372	14569	0580	00232	4190
0125	0277	29904		2387	14567	0683	00351	4045
0150	0190	30152		2413	14536	0782	00489	3796
0175	0063	30395		2439	14487	0874	00642	3537
0200	0083	30708		2463	14504	0960	00807	3308
0225	0043 E	3076 I		2470	14491	1042	00986	3243
0250	0090	30797		2470	14517	1124	01184	3242

C-REF-NO 003	YR 1963	DEPTH 267	WAVES 1 00X0	AIR T 14.6	VIS 6
CONS. NO 062	MONTH 8	MXSAMPD 02	WAVES 2 00X0	WET B 14.3	STN 062
LAT 48-222N	DAY 29	NO.DPTH 12	WND-DIR 090	WW-CODE 62	
LON 70-342W	HR 13.4	W-COLOR	WND-SPD 04	CLD-TPE 7	
MARSD SQ 152	C/I 1813	W-TRNSP 02	BARO 1008.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
134	0000	154	04570	630	0262	14729
140	0010	0772	22215	567	1733	14655
140	0020	0321	27906	515	2225	14543
140	0030	0186	28461	584	2278	14492
140	0050	0156	29017	543	2324	14489
140	0075	0163	29355	558	2351	14501
134	0100	0194	29615	554	2369	14523
134	0125	0267	29889	564	2386	14563
134	0150	0078	29988	538	2406	14484
134	0175	0065	30372	468	2437	14487
134	0200	0078	30752	487	2467	14503
134	0250	0090	30799	492	2470	14517

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1540	04570		0262	14729	0000	00000	24747
0010	0772	22215		1733	14655	0174	00005	10319
0020	0321	27906		2225	14543	0253	00016	5595
0030	0186	28461		2278	14492	0307	00030	5084
0050	0156	29017		2324	14489	0405	00069	4642
0075	0163	29355		2351	14501	0518	00141	4388
0100	0194	29615		2369	14523	0626	00237	4208
0125	0267	29889		2386	14563	0730	00356	4049
0150	0078	29988		2406	14484	0829	00495	3856
0175	0065	30372		2437	14487	0922	00650	3555
0200	0078	30752		2467	14503	1008	00814	3272
0225	0077	3082 I		2473	14507	1090	00991	3217
0250	0090	30799		2470	14517	1171	01189	3240

C-REF-NO 003	YR 1963	DEPTH 91	WAVES 1 00X0	AIR T 15.2	VIS 7
CONS. NO 063	MONTH 8	MXSAMPD 01	WAVES 2 00X0	WET B 14.5	STN 063
LAT 48-247N	DAY 29	NO.DPTH 6	WND-DIR 110	WW-CODE 25	
LON 70-501W	HR 15.7	W-COLOR	WND-SPD 01	CLD-TPE 7	
MARSD SQ 152	C/I 1813	W-TRNSP 02	BARO 1007.8	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
157	0000	157	01690	584	0035	14708
157	0010	0529	26024	596	2058	14605
157	0020	0208	28228	562	2258	14497
157	0030	0129	28724	539	2302	14470
157	0050	0088	29084	549	2333	14460
157	0080	0075	29407	511	2359	14463

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1570	01690		0035	14708	0000	00000	27002
0010	0529	26024		2058	14605	0169	00004	7193
0020	0208	28228		2258	14497	0232	00013	5275
0030	0129	28724		2302	14470	0283	00025	4853
0050	0088	29084		2333	14460	0377	00064	4557
0075	0062 B	2943 I		2362	14457	0488	00134	4277

SECTION IV

Bathythermograms

EXPLANATION OF DATA HEADINGS IN TABLE 2

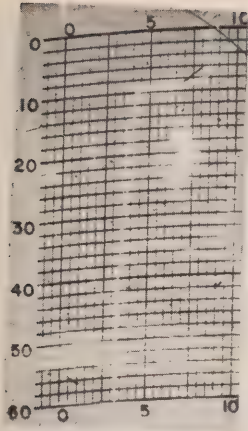
SERIAL NO:	Serial number of bathythermograph assigned by the manufacturer.
LAT:)
) Position of platform at time of BT lowering.
LONG:)
DATE:	
Da	Day
Mo	Month
Yr	Year
TIME:	The Greenwich Mean Time at which the BT lowering was made.
DPTH:	The sounding reported in metres.
SSRT:	The sea surface reference temperature reported to 1/10 of degrees Celsius.
TC: 1/10	The temperature correction used in aligning the trace with respect to its grid.
W-I: PH	(Refer to tables 4 & 5 pg. 32).
W-II: PH	(Refer to tables 4 & 5 pg. 32).
WD:	Anemometer reading in metres per second.
BAR:	All listed values are to be prefixed by 10 to give the barometric pressure in whole millibars. Example: 08 = 1008 mbs, 23 = 1023 mbs.
WW: code	(Refer to table 7 pg. 34).
CLD: T/A	(Refer to tables 8 & 9 pg. 36).
CONS#:	The consecutive slide number.

TABLE 2

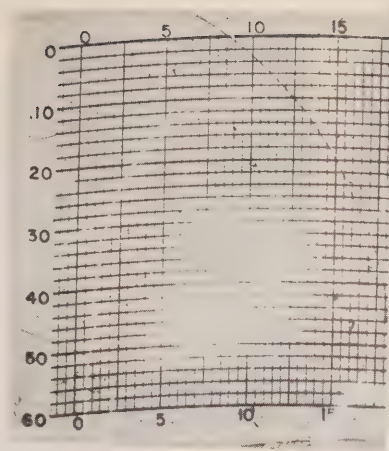
SERIAL No	LAT Deg Min	LONG Deg Min	DATE			TIME hrs min	DPTH m	SSRT 1/10	TC	W-I PH	W-II PH	W-III WDB Amt	BAR Code	WW Code	CLD TA	CONS#
			Da	Mo	Yr											
52122	48 08	069 46	19	08	63	16 00	117	087	-00							001
52122	48 25	070 50	20	08	63	02 30	99	149	-00	X0	X0	05	12	02	0 4	002
12951	48 25	070 50	20	08	63	02 40	99	149	-07	X0	X0	05	12	02	0 4	003
5281	48 22	070 34	20	08	63	06 15	267	145	02	X0	X0	03	12	01	1	004
5281	48 21	070 24	20	08	63	08 47	271	149	02	X0	X0	02	23	02	0 1	005
5281	48 18	070 15	20	08	63	12 10	269	140	02	X0	X0	03	10	03	3 5	006
5281	48 15	070 05	20	08	63	14 45	195	149	02	X0	X0	01	09	81	7 8	007
12951	48 13	069 53	20	08	63	17 15	155	134	-07	X0	X0	04	08	03	3 8	008
5281	48 08	069 46	20	08	63	19 40	252	070	02	XX	XX	02	07	02	3 8	009
52122	48 07	069 41	20	08	63	21 45	91	069	-00	XX	XX	02	07	01	6 7	010
52122	48 10	069 34	20	08	63	22 53	159	048	-00	X1	X0	02	06	01	8 5	011
5281	48 16	069 24	21	08	63	02 10	331	054	02	X1	X0	02	07	02	8 1	012
52122	48 58	067 09	21	08	63	10 00	77	119	-00	X3	X0	10	07	01	6 5	013
12951	48 58	067 10	21	08	63	16 00	101	118	-07	X3	X0	08	06	60	7 8	014
12951	48 59	067 11	21	08	63	17 20	139	119	-07	X3	XX	07	06	01	8 4	015
5281	49 01	067 12	21	08	63	19 04	227	120	02	X3	XX	10	05	01	8 3	016
5281	49 05	067 15	21	08	63	21 40	327	112	02	X4	XX	12	06	02	8 2	017
5281	49 10	067 18	22	08	63	01 05	327	097	02	X1	X3	04	07	02	8 1	018
5281	49 13	067 20	22	08	63	04 42	318	082	02	X1	X2	03	07	02	8 3	019
5281	49 17	067 23	22	08	63	07 20	300	082	02	X1	XX	06	07	02	8 1	020
5281	49 18	067 22	22	08	63	09 35	238	061	02	X1	XX	04	09	02	8 1	021
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5281	49 56	065 11	23	08	63	07 25	188	128	02	X1	XX	07	11	02	6 1	026
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5281	50 00	064 33	23	08	63	16 45	161	112	02	X2	X2	07	13	02	6 3	030
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TABLE 2 (Continued)

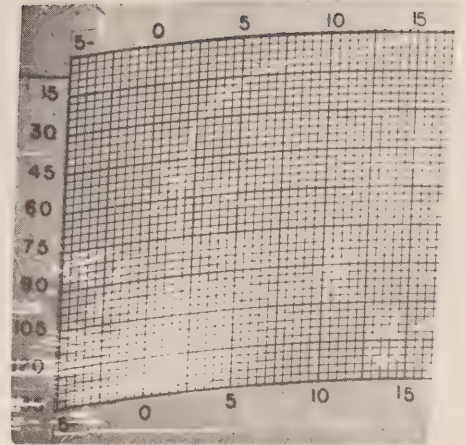
SERIAL No	LAT Deg Min	LONG Deg Min	DATE Da Mo Yr	TIME hrs min	DPTH m	SSRT	TC 1/10	W-I PH	W-II PH	WDB Amt	BAR Code	WW Code	CLD T/A	CONS #
12951	50 01	063 47	23 08 63	22 52	119	125	-07	X2	X2	06	14	03	7 7	032
5281	49 40	062 19	24 08 63	02 55	241	1 6	02	X1	X1	07	17	01	6 2	034
52122	49 05	061 32	24 08 63	17 10	46	135	-00	X2	X3	09	19	02	7 7	036
5281	48 52	061 55	24 08 63	20 00	249	125	02	X2	X3	06	18	02	7 8	037
5281	48 38	062 17	25 08 63	00 13	412	114	02	X3	X4	09	17	81	7 8	038
5281	48 26	062 37	25 08 63	05 33	344	132	02	X3	X4	10	14	20	7 8	039
52122	48 25	063 08	25 08 63	09 03	55	117	-00	X3	X4	12	11	02	7 8	040
12951	48 24	063 40	25 08 63	11 44	115	119	-07	X3	X5	12	11	62	7 8	041
5281	49 02	064 14	25 08 63	16 30	307	119	02	X2	X4	03	13	01	6 7	042
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5281	49 13	063 54	26 08 63	22 28	366	110	02	X1	X3	05	13	03	6 6	044
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5281	48 16	069 24	28 08 63	20 40	338	099	02	X1	X0	08	13	03	6 7	056
12951	48 10	069 34	28 08 63	23 15	152	075	-07	X1	X0	06	12	21	6 8	057
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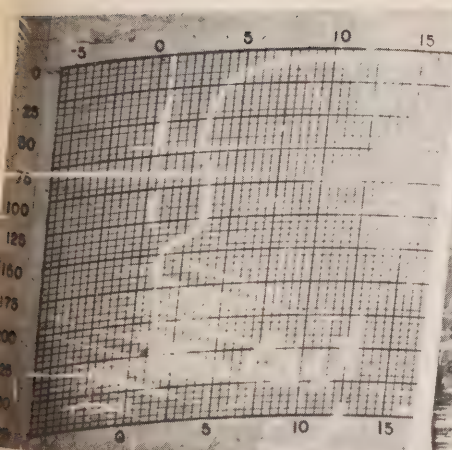
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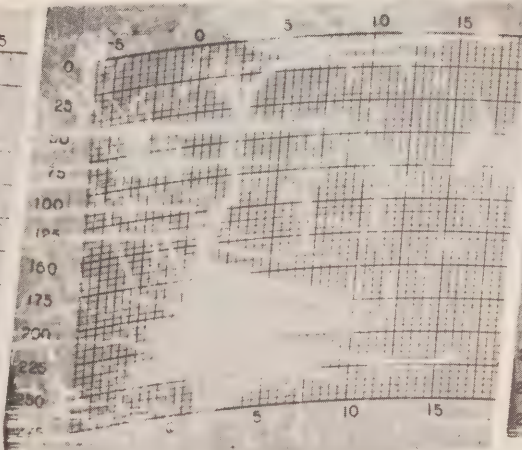
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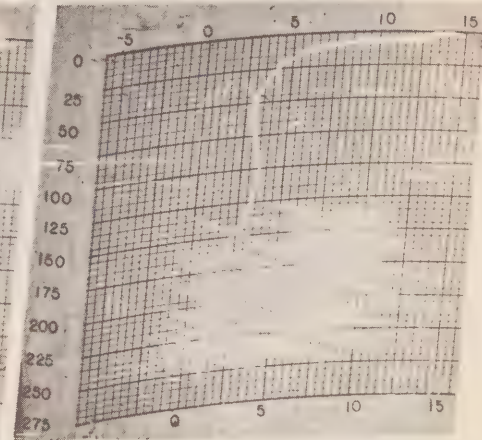
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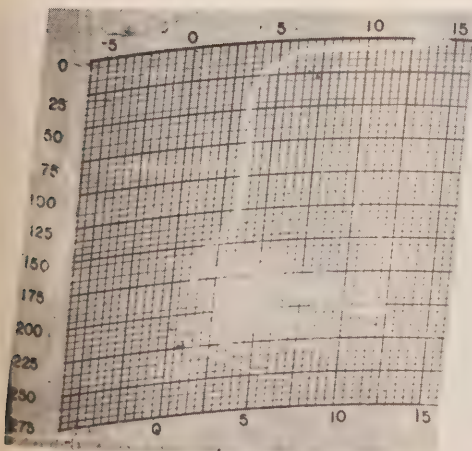
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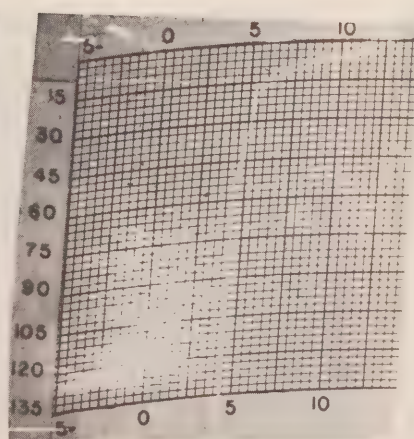
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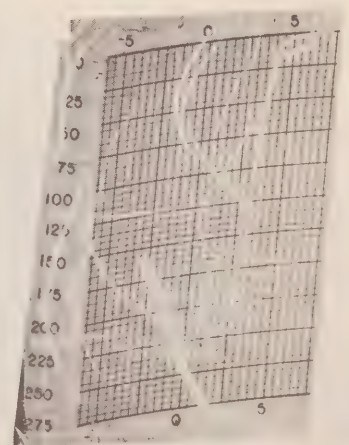
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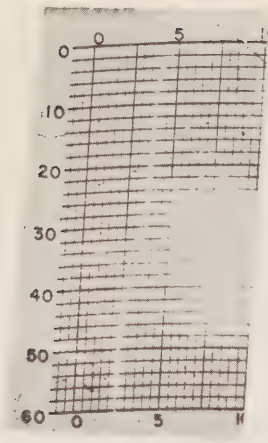
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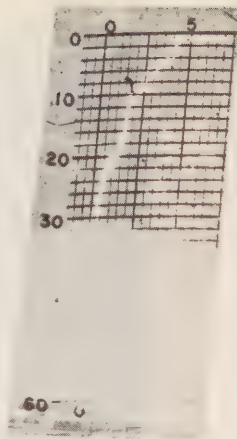
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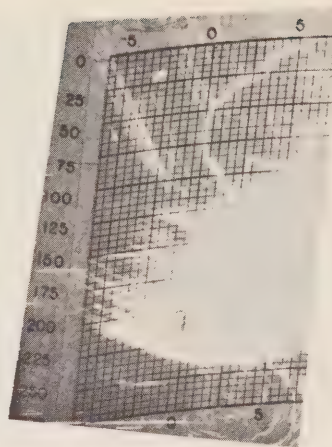
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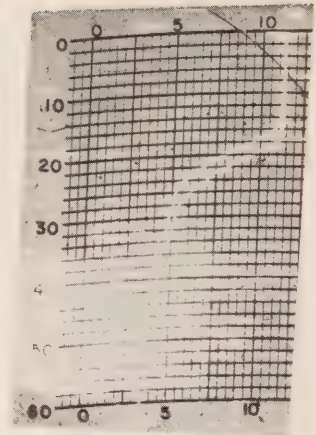
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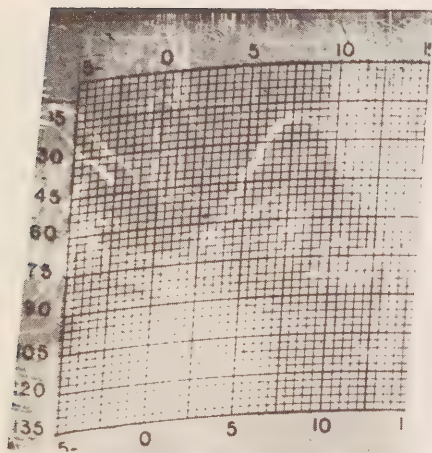
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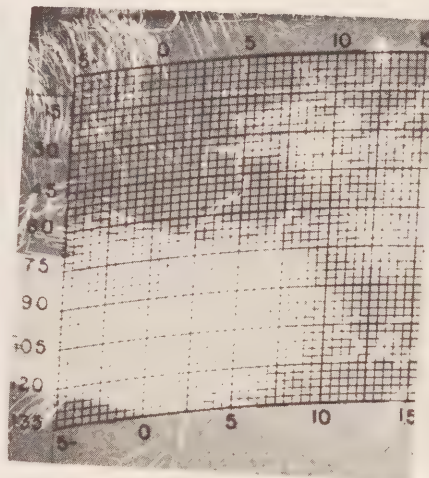
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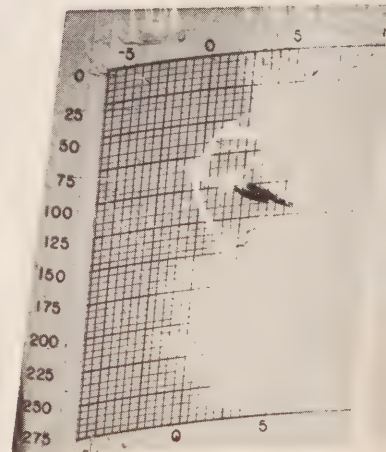
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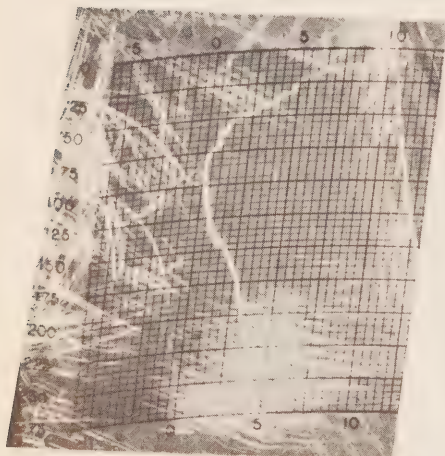
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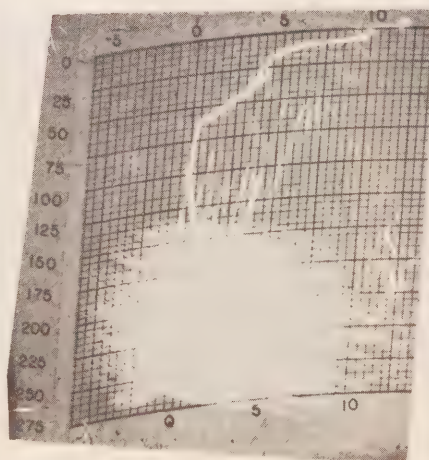
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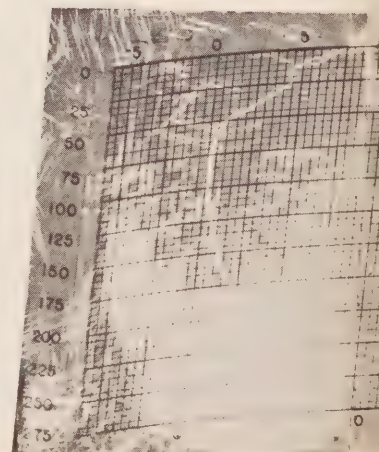
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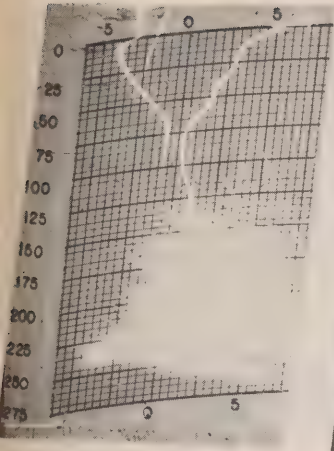
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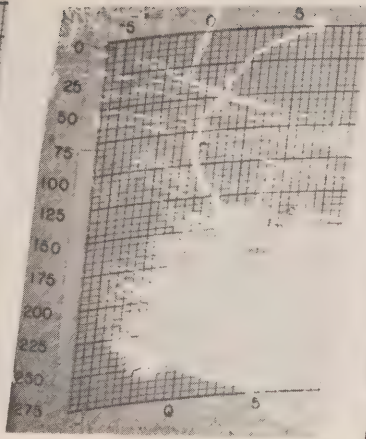
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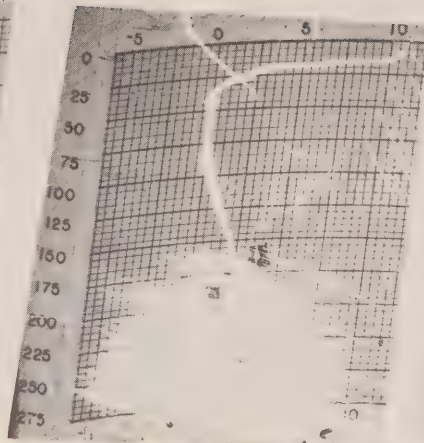
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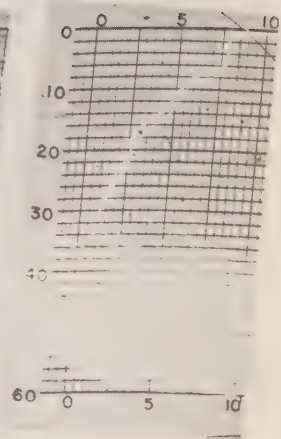
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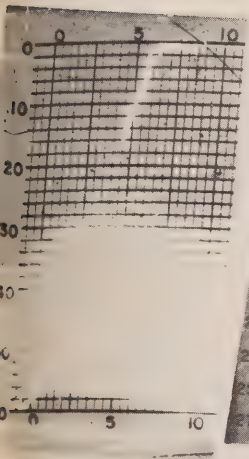
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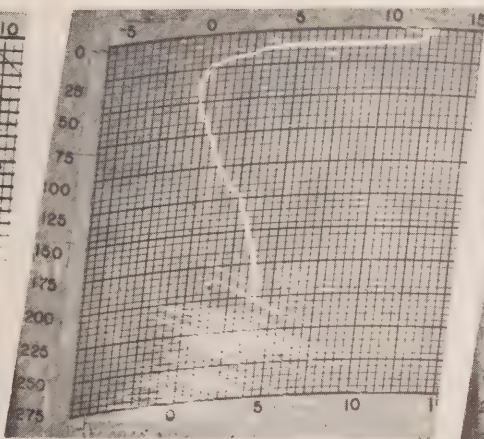
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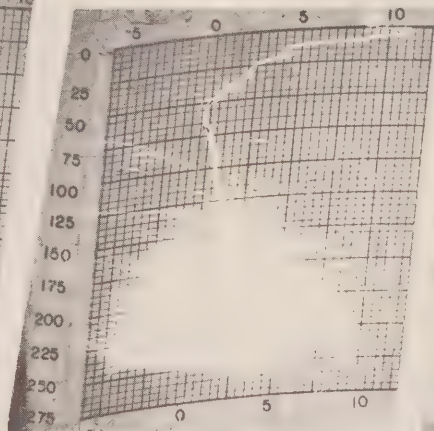
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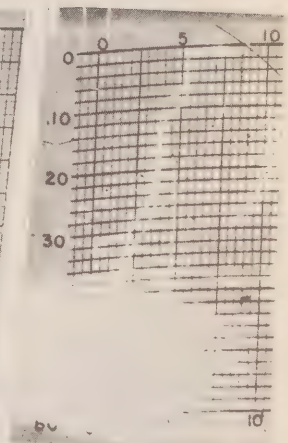
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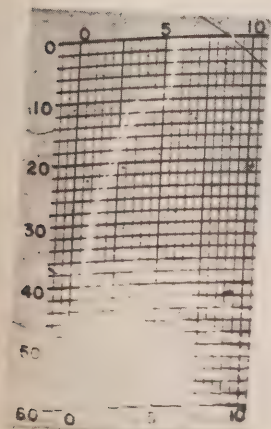
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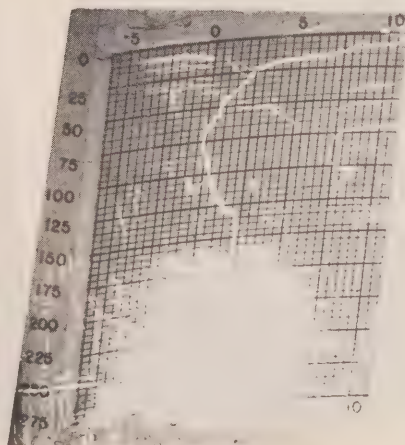
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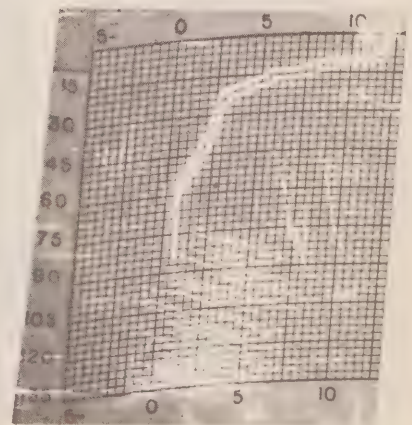
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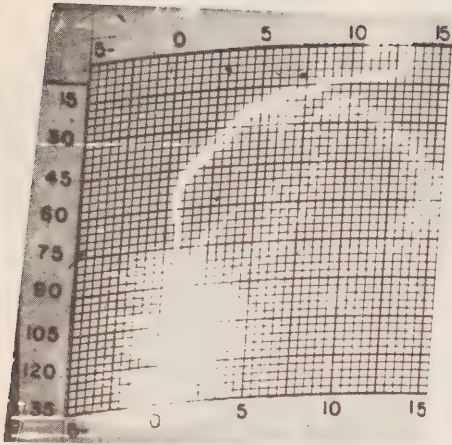
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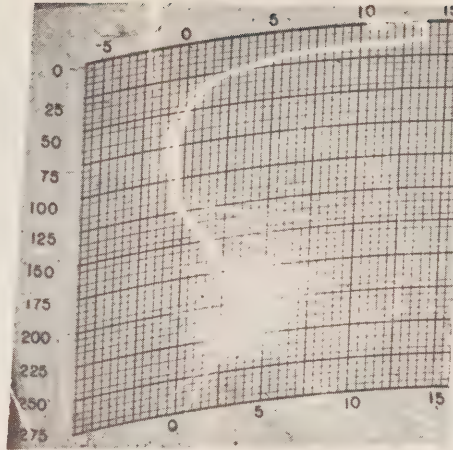
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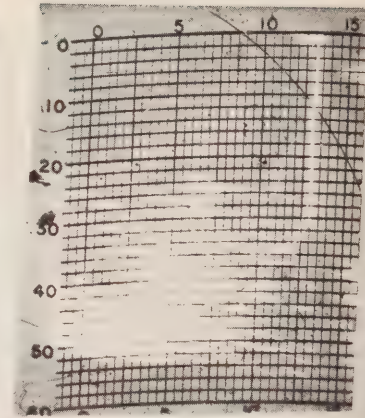
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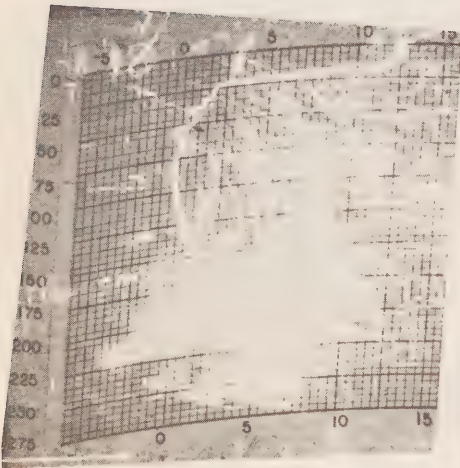
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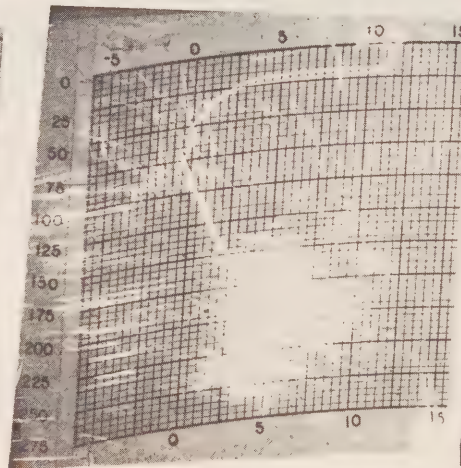
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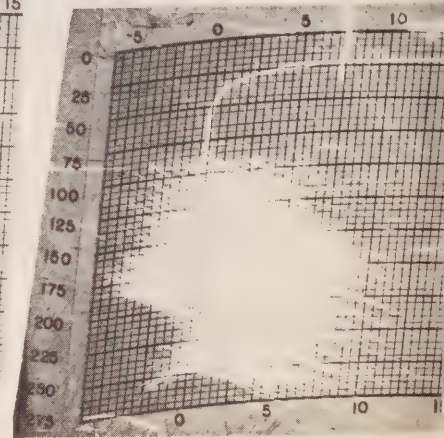
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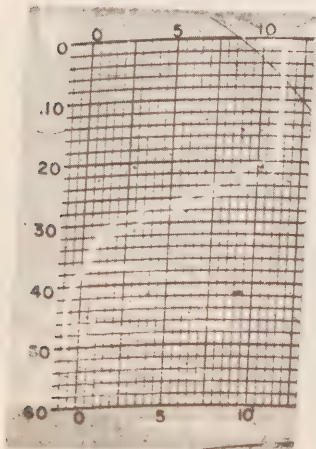
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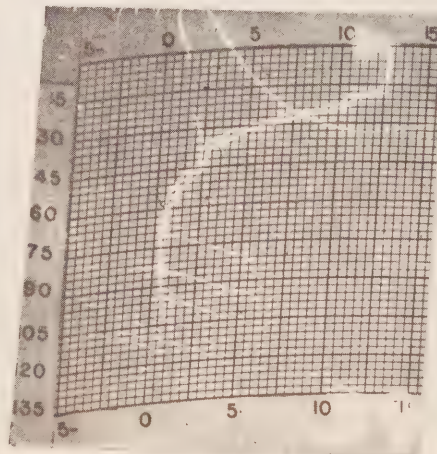
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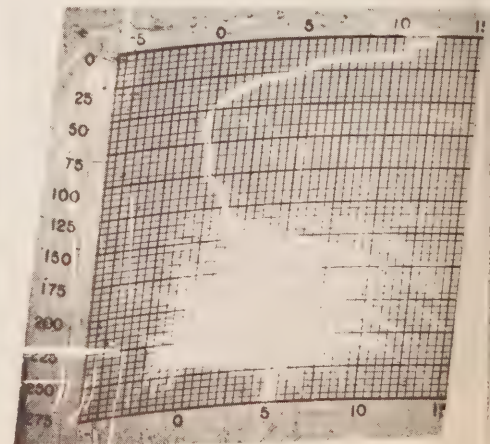
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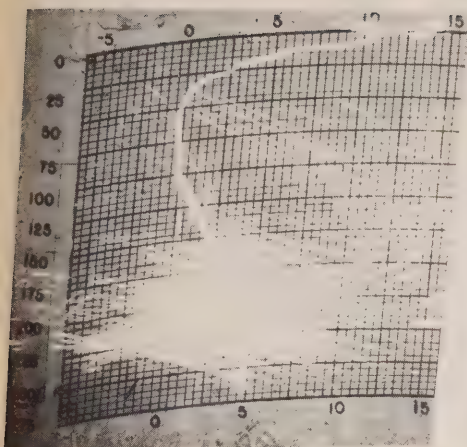
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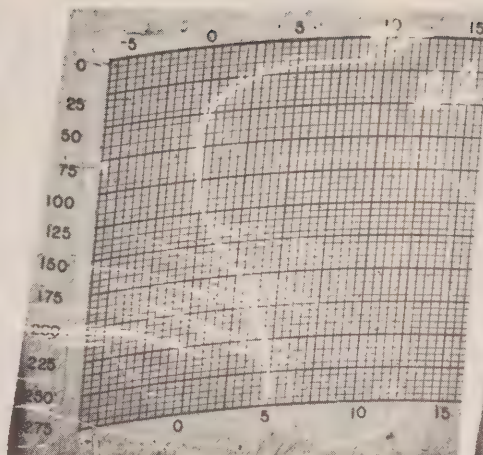
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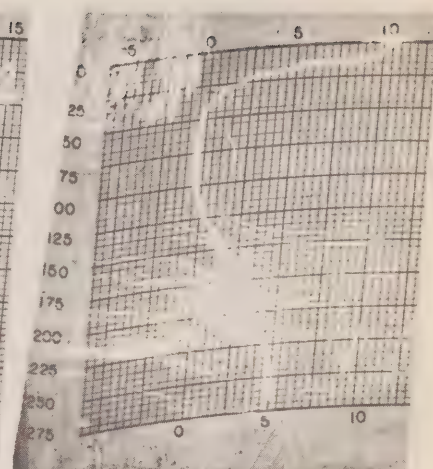
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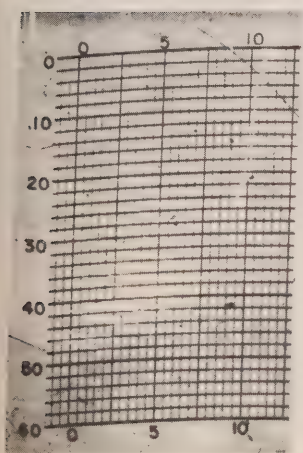
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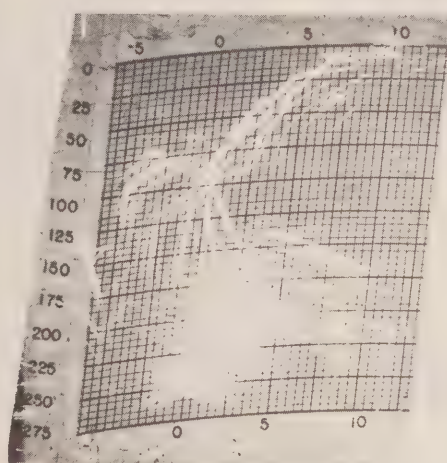
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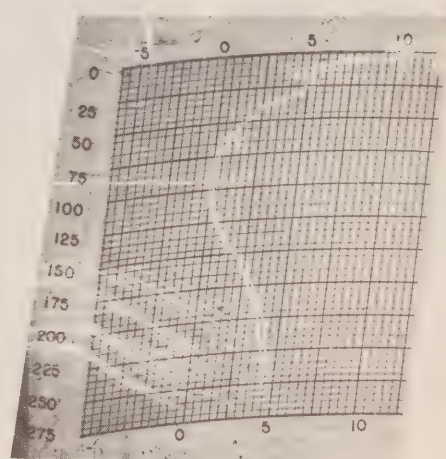
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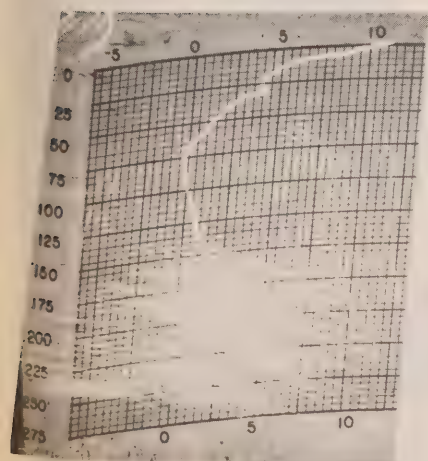
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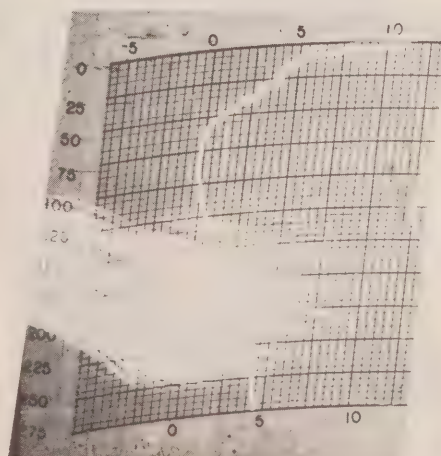
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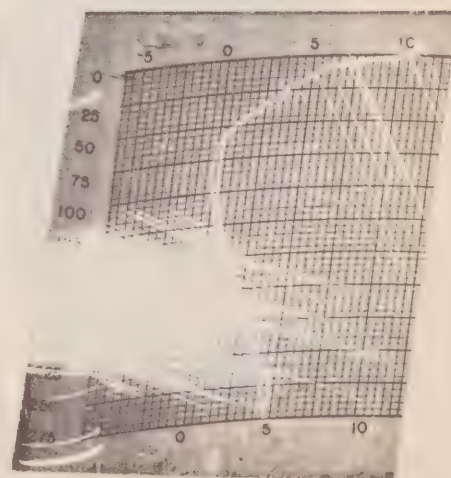
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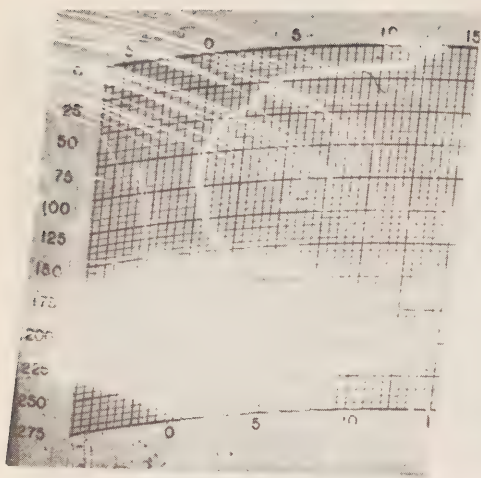
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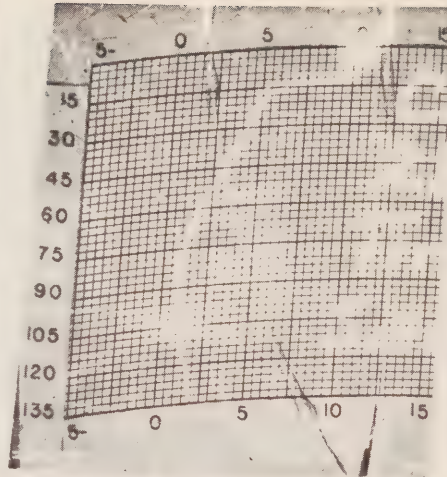
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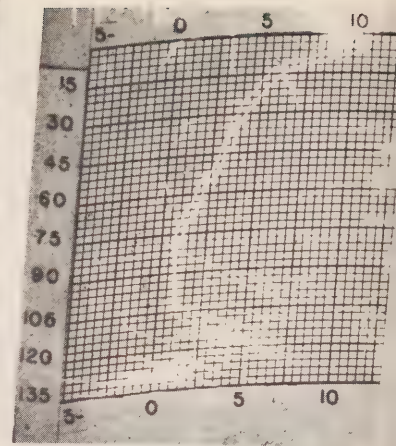
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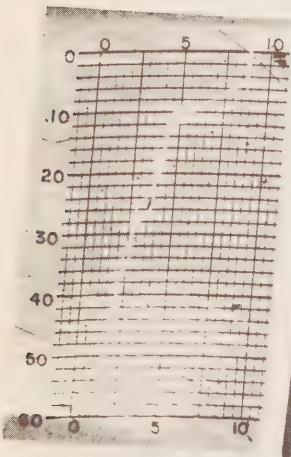
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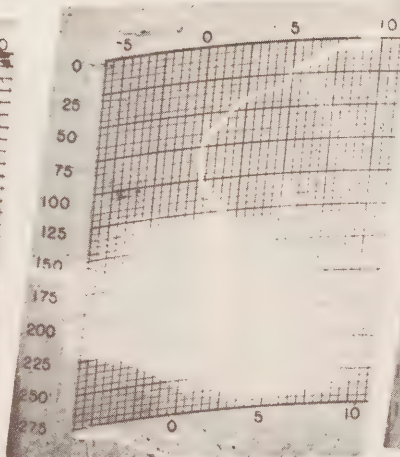
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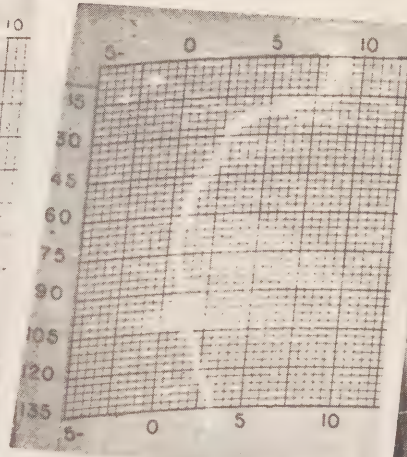
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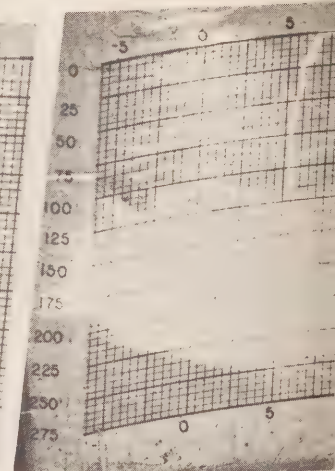
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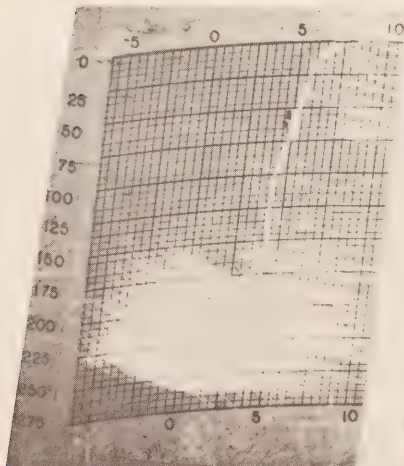
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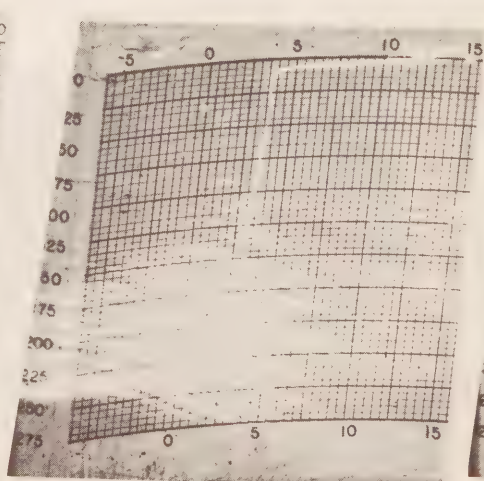
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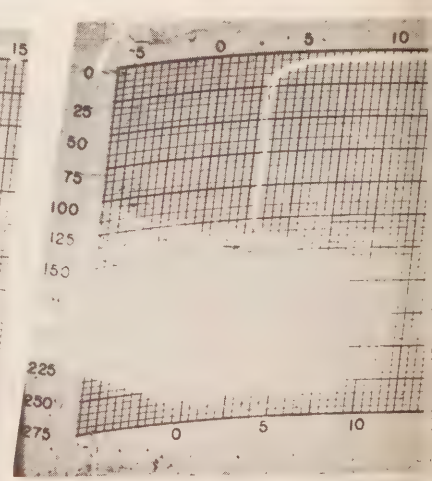
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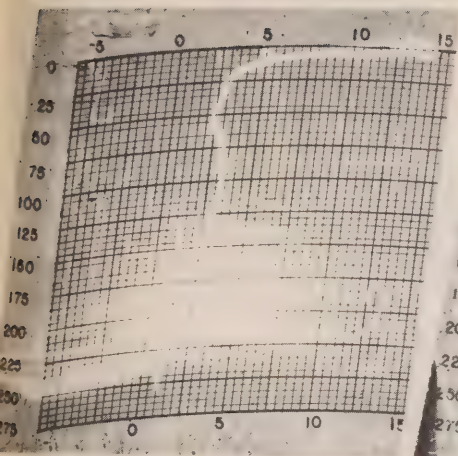
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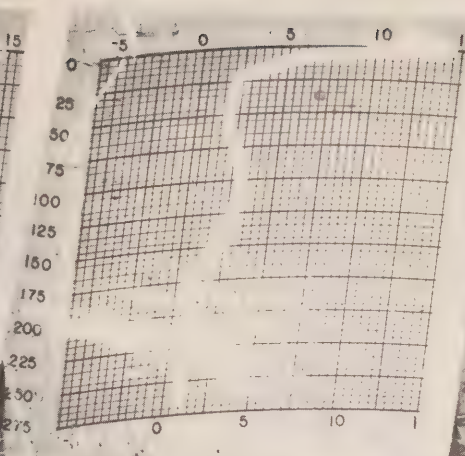
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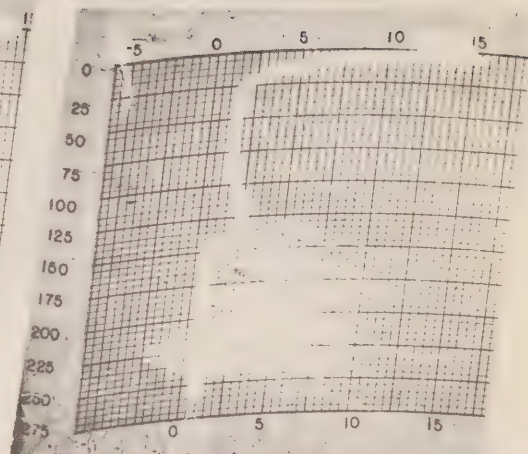
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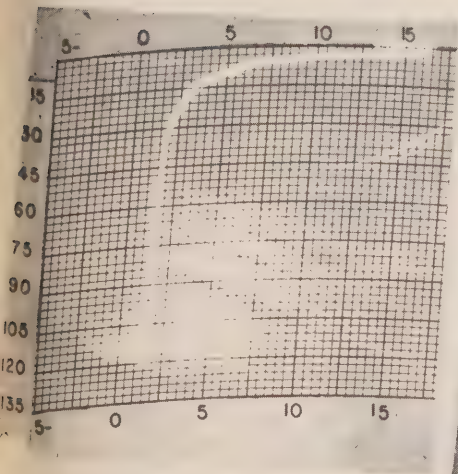
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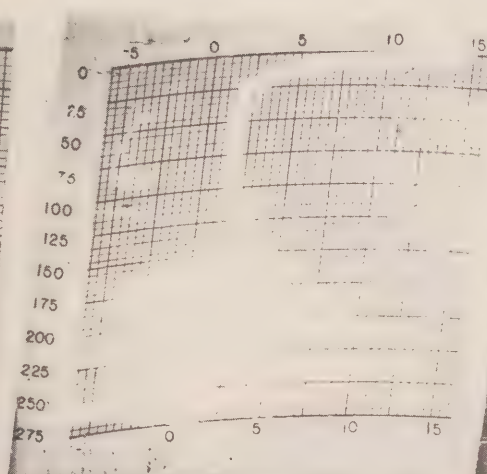
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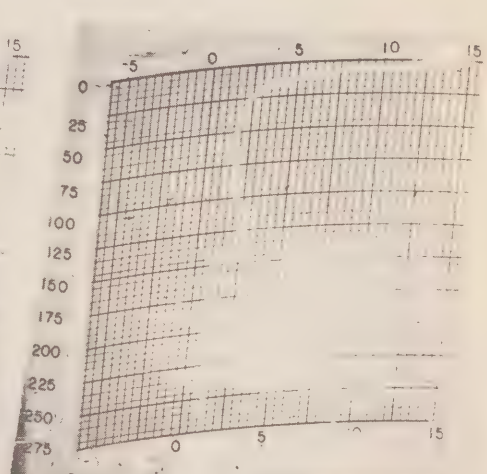
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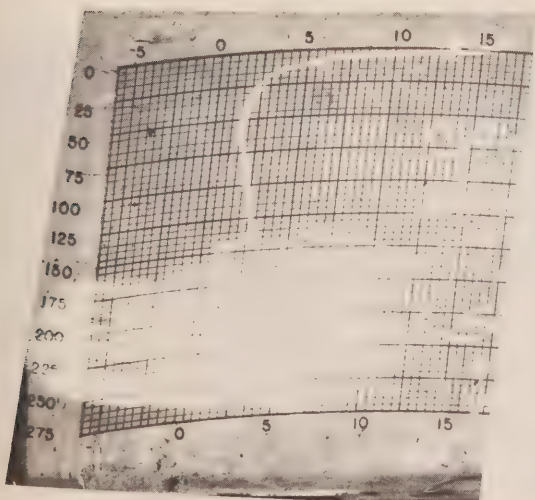
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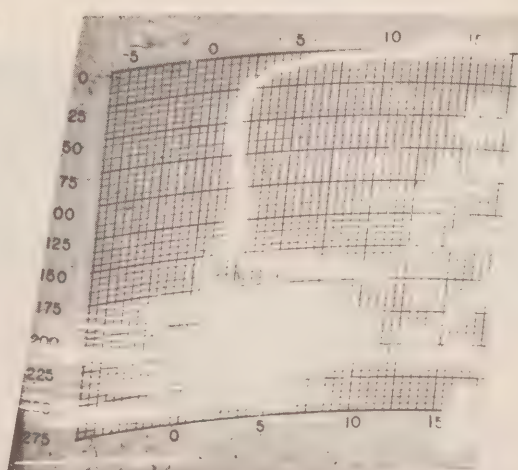
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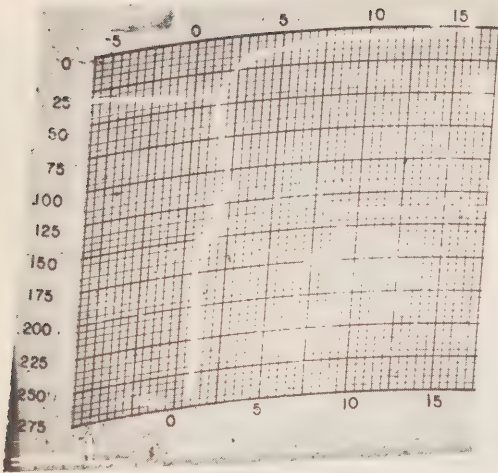
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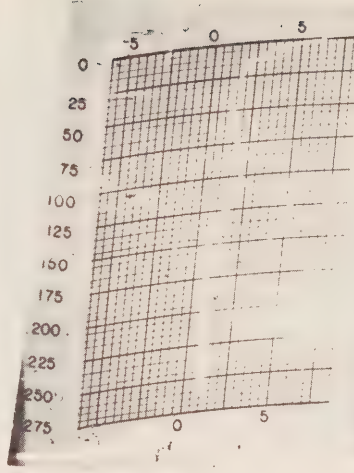
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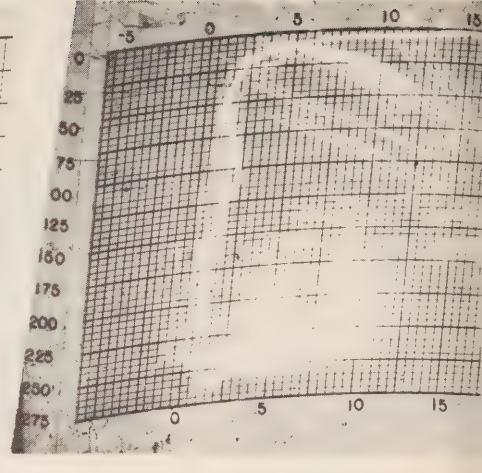
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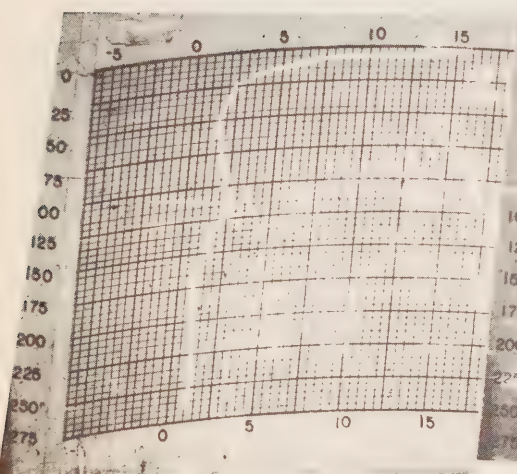
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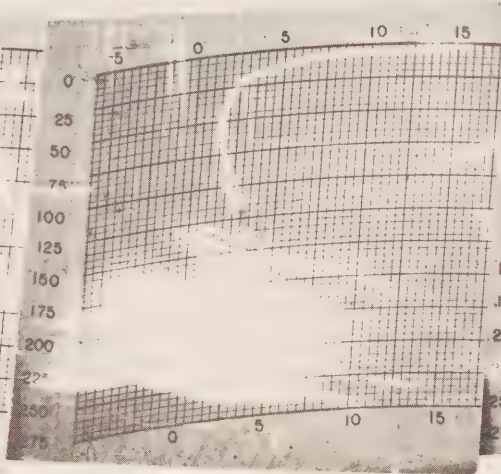
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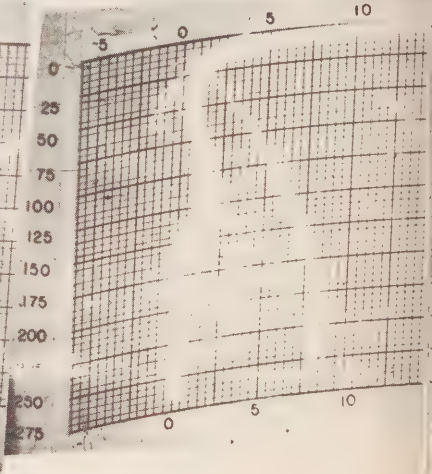
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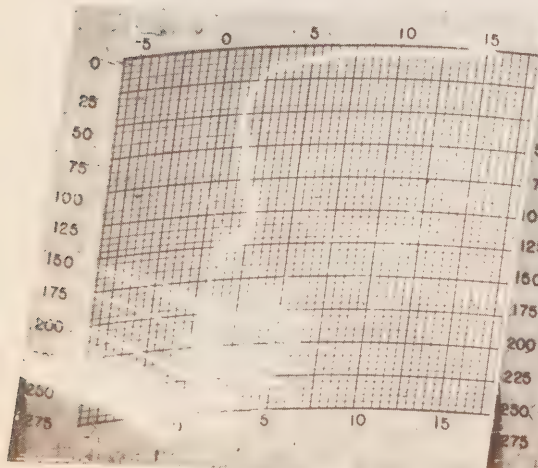
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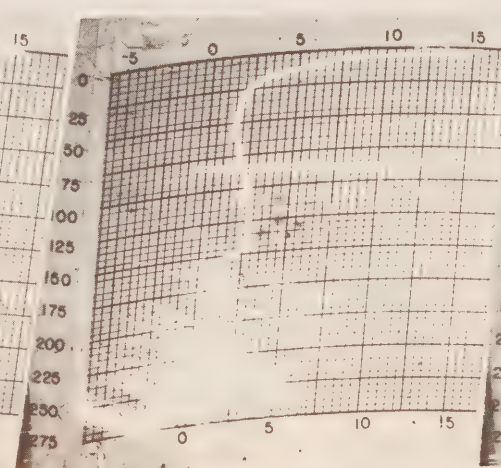
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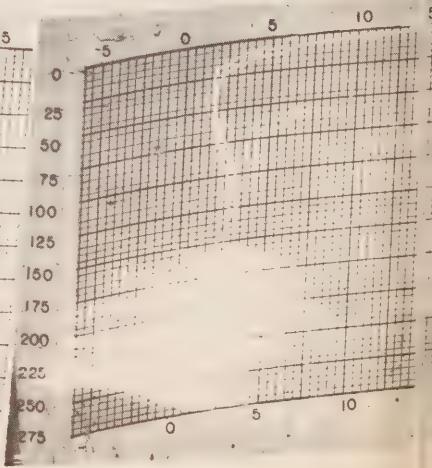
77



78



80



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CANADA

DATA RECORD

GRAND BANKS TO THE AZORES

June 1 to July 15, 1964

No. 13

1965 Data Record Series

Canadian Oceanographic Data Centre

Programmed by the
Canadian Committee on Oceanography

1965

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GRAND BANKS TO THE AZORES

June 1 to July 15, 1964

CODC Reference: 10-64-009

No. 13

1965 Data Record Series

Canadian Oceanographic Data Centre

615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography

DEPARTMENT OF MINES AND TECHNICAL SURVEYS

GRAND BANKS TO AZORES

Ship	CSS "Baffin"
Local cruise designation:	BIO-9-64
Cruise period:	June 1 - July 15, 1964
Observers:	C. R. Mann Scientist in Charge
	T. R. Foote
	A. B. Grant
	R. Reiniger
	C. K. Ross

Bedford Institute of Oceanography, Dartmouth, N. S.

SECTION I

Description of data collection procedures



"BAFFIN"

Canadian Hydrographic Service



INTRODUCTION

The object of this cruise was to collect oceanographic data for further studies of ocean circulation in the area from the Grand Banks to the Azores as well as to follow the course of the Gulf Stream.

EXTRACT OF CRUISE LOG

Phase 1:	Depart Halifax, N.S.	June 1, 1964
	Arrive St. John's, Nfld.	June 18, 1964
Phase 2:	Depart St. John's, Nfld.	June 20, 1964
	Arrive Halifax, N.S.	July 15, 1964.

OBSERVATIONAL PROCEDURES

This cruise was conducted in two phases. During Phase 1, three north-south lines of stations were run (Station 1-41) to determine the position of the Gulf Stream and the temperature structure across it after it has passed the tail of the Grand Banks.

At the beginning of phase 2, the Gulf Stream was followed using GEK and BTs. They were also used to outline an eddy near station 46. En route from St. John's, station 42 was occupied to obtain samples for radio-activity analysis. Stations 43-45 were shallow (1000 m) stations taken while following the stream. Stations 46-90 were occupied after outlining the eddy. The Halifax section was run when returning to Halifax.

Temperature, salinity and oxygen data were collected in two casts at all stations, following standard procedures. Standard depths were generally adhered to, except that at shallow depths some of the bottles were omitted and three bottles spaced 200 metres apart were placed at the bottom of the deep cast. All deep casts were to the bottom. A pinger was attached to the end of the wire and using a PGR it could generally be placed within 20 metres of the bottom. BT's were taken at each station and at half way between stations. A GEK and a thermistor giving surface temperature were towed along all tracks.

The Gulf Stream was followed by zig-zagging across it, observing the strength of the current with the GEK and carrying a running plot of the temperature at 200 metres obtained by BT's.

A large mass of water, temperature about 14.5°C , was found at stations around number 58. At 58 it reached a depth of 1000 metres and the oxygen content was constant throughout the column of water (5.44 ml/l) indicating that this mass had been formed recently.

Some valuable hydrography was done during the cruise using the PGR. Except for some small gaps at the beginning, track soundings were done along all tracks. The sounding (Depth) shown for each station is the PGR reading uncorrected for sound velocity and is therefore less than the maximum thermal depth.

Silicates were determined by spectrophotometer at all depths at even stations on Phase 1 and at odd stations on Phase 2. At stations between, silicates were determined down to 1000 metres and also for the bottom two bottles on the deep cast. Samples were taken for total silicate determination at selected stations.

A large water sampling bottle (134 litre) was used to collect samples at stations 15, 27, 42, 72 for radio-activity studies. Surface samples were also collected at 1, 12, and 38.

Samples for bacteria studies were drawn at most odd stations on Phase 1 and most even stations on Phase 2. Counts of number of bacteria were made during the cruise.

Richter and Wiese as well as Yoshino reversing thermometers were employed in Knudsen water bottles. Surface samples were taken in a metal bucket, the temperature being measured with a mercury-in-glass thermometer. Dissolved oxygen was determined by the modified Winkler technique (F.R.B. Bulletin 125).

Weather observations were made each hour by the ship's officers.

BATHYTHERMOGRAPH DATA

BT slides and records were processed by the Bathythermograph Centre at the Bedford Institute of Oceanography.

Salinity determinations were carried out at sea using an Auto-Lab inductive salinometer. It soon became apparent that these values were consistently low and not of the required accuracy. All attempts to improve the determination were in vain and it was therefore decided to retain all samples for analysis ashore, using the NIO conductive salinometer. A number of samples had deteriorated however, and in view of later extensive investigations,

it was decided to report the samples 1 - 41 to only 1/100 part per 1000 with a standard deviation of ± 0.02 and an error estimate of 1σ . The remaining stations appear to be much more reliable and are reported to 1/1000 part per 1000.

Where a sample had deteriorated, or lost, or for some other reason determination could not be made, the data summary columns were left blank. In the instances listed below, where the Auto-Lab and NIO T-S curves were regular and almost parallel, an Auto-Lab value adjusted to the NIO values was entered.

Station	-	Depth	Station	-	Depth
3		1192	14		3065
3		2995	15		All depths
4		935	21		4628
4		1120	26		2054
7		0	28		2665
9		All depths	29		945
10		0	30		4456
10		1150	31		3493
10		3143	32		All depths
			33		All depths

SUMMARY OF OBSERVATIONS

Oceanographic Stations	97
Temperature and Salinity	All stations
Oxygen	Stations 1 - 90
Bathythermographs	291
Silicates	Phase 1 Even stations - all depths Alternate stations - 0-1000 metres Phase 2 Odd stations - all depths Alternate stations - 0-1000 metres and bottom
Large Water Samples	Stations 15, 27, 42, 72 selected depths Surface only 1, 12, 38
Microbiology	Phase 1 Most odd stations Phase 2 Most even stations
Hydrography	6,058 miles track sounding

PERSONNEL

C. R. Mann	Scientist in Charge
T. R. Foote	
L. P. Murdock	
I. M. Pagden	
A. R. Coote	
W. Young	
A. B. Grant	
R. S. Hiltz	
E. A. Lewis	
R. Reiniger	
C. K. Ross	
G. W. Pearce	
D. A. Fisher	
W. E. Bishop	
R. Clarke	
E. Batoosingh	

Data Analyses

Compilation of Data	A. B. Grant R. A. Clarke
Salinity Determination	W. Young G. W. Pearce
Salinity Investigation	C. R. Mann A. B. Grant
B. T. Processing	T. A. Grant D. M. MacDonald

SECTION II

Description of the machine-generated data record

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an **"estimate of precision"** for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** (σ) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under **"GENERAL INFORMATION"** in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record **"A"** is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an **"interpolation error estimate"** derived from the particular interpolation formula used. There are two purposes in stating the error estimates; **first**, to give an indication of the quality of the interpolated data; **second**, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T , S , O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the **"measurement error estimate"** comprises the **"combined measurement and interpolation error estimate"**. It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

1 IDENT. CODE		2 LATITUDE (N=+)		3 LONGITUDE (W=+)		5 DATE		6 TIME		7 DEPTH		9 NO. DEPTHS OBS'D.		VESSEL									
COUNTRY INST.		DEG. MIN.		DEG. MIN.		YEAR MONTH DAY		HOURS G.M.T.		TO BOTTOM				ENTERED BY									
1 8														CHECKED BY									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		19 20 21 22 23 24 25 26 27 28 29 30 31		34 35																			
10 WATER		11 WAVES I		12 WAVES II		13 WIND		16 WET BULB		17 W.W. CODE		18 CLOUD		20 HOURS AFTER H.W.									
COLOUR TRANS.		Dw Dw Pw Hw		Dw Dw Pw Hw		DIR.		15 AIR TEMP.		(SEPT. 62)				21 UNASSIGNED									
36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		22 CRUISE REFERENCE NUMBER		23 CONSEC. NUMBER		24 OBS. NO.															
OBSERVED CARD		* COLUMNS 1-24 AS ON MASTER *		8 TEMPERATURE		9 SALINITY		10 OXYGEN		13 PO ₄ - P		14 TOTAL - P		15 NO. - N		16 NO. - N		17 SIO ₂ - SI		18 P.H.		CARD	
1		e		e		d/e		e		e		e		e		e		e		e		3	
2																						3	
3																						3	
4																						3	
5																						3	
6																						3	
7																						3	
8																						3	
9																						3	
10																						3	
11																						3	
12																						3	
13																						3	
14																						3	
15																						3	
16																						3	
17																						3	
18																						3	
19																						3	
20																						3	

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ = Standard deviation of the combined error estimates at standard oceanographic depth,
 ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $1/3 (\bar{V}_{i_1} - V_{i_2})$
 γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) ww-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

(1) CRUISE REFERENCE NUMBER:

Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.

(2) CONSECUTIVE NUMBER:

Indicates the chronological order in which the stations were occupied.

(3) LATITUDE:

Indicate the position of the platform at the time of observation.

(4) LONGITUDE:

(5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).

(6) YEAR:

(7) MONTH:

(8) DAY:

(9) HOUR:

The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.

(10) COUNTRY/INSTITUTE:

The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.

(11) DEPTH:

The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".

(12) MAXIMUM

SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).
00 m - 50 m = 00
51 m - 150 m = 01
151 m - 250 m = 02
etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: The Forel-Ule Code (see table 2 and NOTE under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;

NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.

- (16) WAVES 1
($d_W d_W P_W H_W$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_W d_W P_W H_W$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE
(WND-FCE): Beaufort notation (See Table 6).
- WIND SPEED
(WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO ₄	(9) -P-	(10) NO ₂	(11) NO ₃	(12) SiO ₂
				(13) pH.	

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 C1\%$, reported in:
a. 1/100 parts per 1000, or
b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places. An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

- (8) PO_4 Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
- (9) -P- Total Phosphorus reported to hundredths of microgram-atoms per litre.
- (10) NO_2 Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
- (11) NO_3 Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
- (12) SiO_2 Silicate-Silicon reported in whole microgram-atoms per litre.
- (13) pH The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

(1) <i>DEPTH</i>	(2) <i>TEMP</i>	(3) <i>SAL</i>	(4) <i>OXYGEN</i>	(5) <i>SGMT</i>	(6) <i>SOUND</i>
(7) <i>DELTA-D</i>	(8) <i>POT-EN</i>	(9) <i>SVA</i>			

- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY:
- A. The reported salinity values are measured to three decimal places.
 - (i) the interpolation error estimate is less than twice the standard deviation of measurement
 - the interpolated value is reported to three decimal places (e.g., 30.139).
 - (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 - the interpolated value is reported to two decimal places, and followed by the **interpolation error estimate** (e.g., 29.23 C).
 - B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 - the interpolated value is reported to two decimal places, and followed by the **combined measurement and interpolation error estimate** (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "Introduction" to section II of the data record).

(5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.

(6) SOUND VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).

(7) DELTA-D: The geo-potential anomaly as defined by:

$$\Delta D = \int_0^p \delta dp$$

ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).

(8) POTENTIAL ENERGY ANOMALY:

The Potential energy anomaly χ as defined by:

$$\chi = 1/g \int_0^p p \delta dp = \int_0^z \rho p \delta dz$$

χ is expressed in units of 10^8 ergs/cm² and recorded to two decimal places (e.g., 116.44).

(9) SPECIFIC VOLUME ANOMALY:

The specific volume anomaly as defined by:

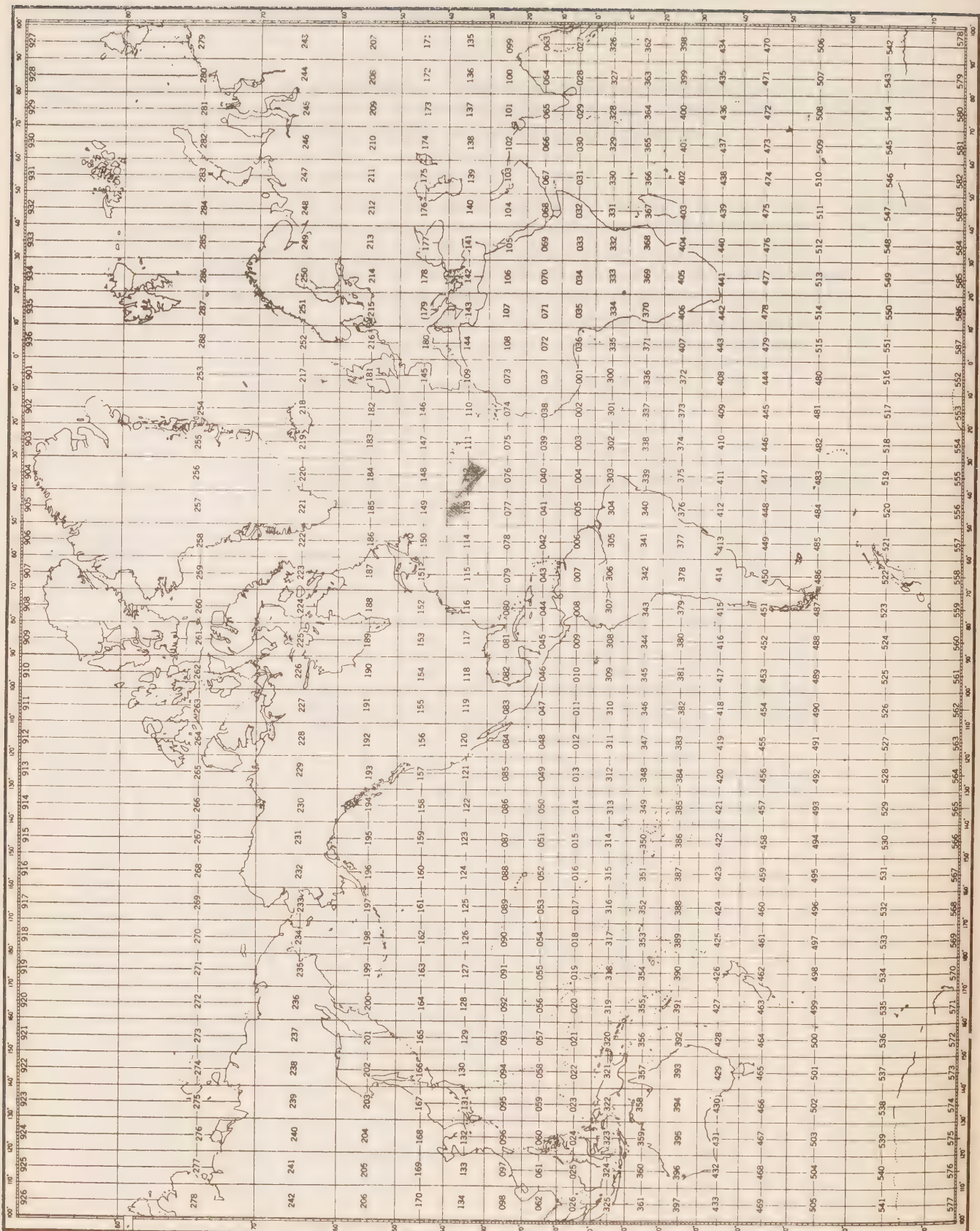
$$\delta = \alpha - \alpha_{35.0.P}$$

δ is expressed in ml/gr, and conventionally reported as $10^5 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs

* (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval**. The **third**, and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two interpolations between the last two observed depths.



MARSDEN SQUARE CHART

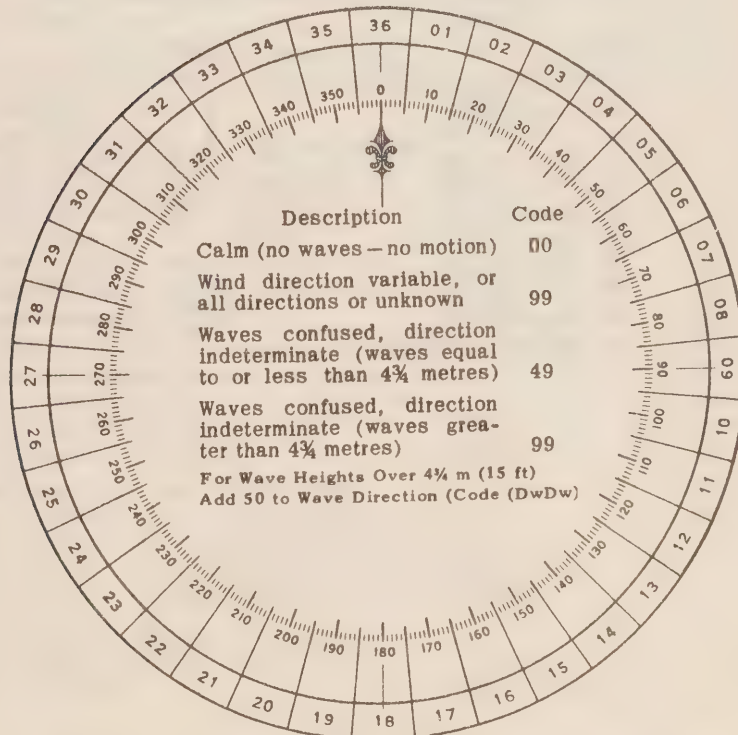
Table 1
CONVERSION
MINUTES TO $\frac{1}{4}$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (P_w)
(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (H_w)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code			Code
0	Less than ¼ m (1 ft)	Add 50 to Dw Dw	0 5 m (16 ft)
1	½ m (1½ ft)		1 5½ m (17½ ft)
2	1 m (3 ft)		2 6 m (19 ft)
3	1½ m (5 ft)		3 6½ m (21 ft)
4	2 m (6½ ft)		4 7 m (22½ ft)
5	2½ m (8 ft)		5 7½ m (24 ft)
6	3 m (9½ ft)		6 8 m (25½ ft)
7	3½ m (11 ft)		7 8½ m (27 ft)
8	4 m (13 ft)		8 9 m (29 ft)
9	4½ m (14 ft)		9 9½ m (30½ ft) or more
x	Height not determined		

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww			
No meteors except photometeors	00	Cloud development not observed or not observable	
	01	Clouds generally dissolving or becoming less developed	
	02	State of sky on the whole unchanged	
	03	Clouds generally forming or developing	
Haze, dust, sand or smoke	04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes	
	05	Haze	
	06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
	07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
	08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
	09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
	10	Mist	
	11	Patches of } shallow fog or ice fog at the station, whether on land or sea, not	
	12		More of less } deeper than about 2 metres on continuous land or 10 metres at sea
	13	Lightning visible, no thunder heard	
	14	Precipitation within sight, not reaching the ground or the surface of the sea	
	15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station	
	16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station	
	17	Thunderstorm, but no precepitation at the time of observation	
	18	Squalls	} at or within sight of the station during the preceding hour or at the time of observation
	19	Funnel clouds	
ww = 20 - 29			
	20	Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation	
	21	Drizzle (not freezing) or snow grains	
	22	Rain (not freezing)	
	23	Snow	
	24	Rain and snow or ice pellets, type (a)	
	25	Freezing drizzle or freezing rain	
	26	Shower(s) of rain	
	27	Shower(s) of snow, or of rain and snow	
	28	Shower(s) of hail, or of rain and hail	
	29	Fog or ice fog	
	29	Thunderstorm (with or without precipitation)	
ww = 30 - 39			
	30	Slight or moderate dust-storm or sand-storm	
	31		- has decreased during the preceding hour
	32	- no appreciable change during the preceding hour	
	33	- has begun or has increased during the preceding hour	
	34	Severe dust-storm or sand-storm	
	35		- has decreased during the preceding hour
	36	- no appreciable change during the preceding hour	
	37	- has begun or has increased during the preceding hour	
	38	Slight or moderate blowing snow	
	39	Heavy blowing snow	
ww = 40 - 49			
	40	Fog or ice fog at the time of observation	
	41	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer	
	42	Fog or ice fog in patches	
	43	Fog or ice fog, sky visible	
	44	Fog or ice fog, sky invisible	
	45	Fog or ice fog, sky visible	
	46	Fog or ice fog, sky invisible	
	47	Fog or ice fog, sky visible	
	48	Fog or ice fog, sky invisible	
	49	Fog, depositing rime, sky visible	
	49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

- | | | | |
|----|--|---|--------------------------------------|
| 50 | Drizzle, not freezing, intermittent | { | slight at time of observation |
| 51 | Drizzle, not freezing, continuous | | |
| 52 | Drizzle, not freezing, intermittent | { | moderate at time of observation |
| 53 | Drizzle, not freezing, continuous | | |
| 54 | Drizzle, not freezing, intermittent | { | heavy (dense) at time of observation |
| 55 | Drizzle, not freezing, continuous | | |
| 56 | Drizzle, freezing, slight | | |
| 57 | Drizzle, freezing, moderate or heavy (dense) | | |
| 58 | Drizzle and rain, slight | | |
| 59 | Drizzle and rain, moderate or heavy | | |

ww = 60 - 69 Rain

- | | | | |
|----|---|---|---------------------------------|
| 60 | Rain, not freezing, intermittent | { | slight at time of observation |
| 61 | Rain, not freezing, continuous | | |
| 62 | Rain, not freezing, intermittent | { | moderate at time of observation |
| 63 | Rain, not freezing, continuous | | |
| 64 | Rain, not freezing, intermittent | { | heavy at time of observation |
| 65 | Rain, not freezing, continuous | | |
| 66 | Rain, freezing, slight | | |
| 67 | Rain, freezing, moderate or heavy | | |
| 68 | Rain or drizzle and snow, slight | | |
| 69 | Rain or drizzle and snow, moderate or heavy | | |

70 - 79 Solid precipitation not in showers

- | | | | |
|----|---|---|---------------------------------|
| 70 | Intermittent fall of snow flakes | { | slight at time of observation |
| 71 | Continuous fall of snow flakes | | |
| 72 | Intermittent fall of snow flakes | { | moderate at time of observation |
| 73 | Continuous fall of snow flakes | | |
| 74 | Intermittent fall of snow flakes | { | heavy at time of observation |
| 75 | Continuous fall of snow flakes | | |
| 76 | Ice prisms (with or without fog) | | |
| 77 | Snow grains (with or without fog) | | |
| 78 | Isolated starlike snow crystals (with or without fog) | | |
| 79 | Ice pellets, type (a) | | |

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

- | | | | |
|----|--|---|---|
| 80 | Rain shower(s), slight | | |
| 81 | Rain shower(s), moderate or heavy | | |
| 82 | Rain shower(s), violent | | |
| 83 | Shower(s) of rain and snow mixed, slight | | |
| 84 | Shower(s) of rain and snow mixed, moderate or heavy | | |
| 85 | Snow shower(s), slight | | |
| 86 | Snow shower(s), moderate or heavy | | |
| 87 | Shower(s) of snow pellets or ice pellets, type (b), with or without rain | { | - slight |
| 88 | or rain and snow mixed | | |
| 89 | Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder | { | - moderate or heavy |
| 90 | | | |
| 91 | Slight rain at time of observation | { | thunderstorm during the preceding hour but not at time of observation |
| 92 | Moderate or heavy rain at time of observation | | |
| 93 | Slight snow, or rain and snow mixed or hail at time of observation | { | thunderstorm at time of observation |
| 94 | Moderate or heavy snow, or rain and snow mixed or hail at time of observation | | |
| 95 | Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation | { | |
| 96 | Thunderstorm, slight or moderate, with hail at time of observation | | |
| 97 | Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation | { | |
| 98 | Thunderstorm, combined with duststorm or sandstorm at time of observation | | |
| 99 | Thunderstorm, heavy, with hail at time of observation | | |

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus	5	Nimbostratus
1	Cirrocumulus	6	Stratocumulus
2	Cirrostratus	7	Stratus
3	Alto cumulus	8	Cumulus
4	Altostratus	9	Cumulonimbus
X	Cloud not visible owing to darkness, fog, dust storm, sand storm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{3}{4}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11

CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N.B.
04. Arctic Biological Station, St. Anne de Bellevue, P.Q.
05. Biological Station, St. John's, Nfld.
06. Station de Biologie Marine, Grande Riviere, P.Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N.S.
09. Pacific Naval Laboratory, Esquimalt, B.C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION III

Serial oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Bedford Institute of Oceanography
<u>Observation platform:</u>	CSS "Baffin"
<u>Vessel's cruising speed:</u>	12 knots
<u>Total number of stations occupied:</u>	97
<u>Anemometer height above sea level:</u>	22 metres
<u>Barometer readings</u>	Aneroid Barometer (corrected)
<u>Air temperature</u>	Sling Psychrometer
<u>Wet bulb temperature</u>	Sling Psychrometer
<u>Surface sea water temperature</u>	Bucket sample (mercury in glass thermometer)

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature:	0.02
Salinity:	(See Salinity Determination)

C-REF-NO 009	YR 1964	DEPTH 5236	WAVES 1 2333	AIR T 22.8	VIS 6
CONS. NO 001	MONTH 6	MXSAMPD 54	WAVES 2 2534	WET B 21.5	STN
LAT 37-297N	DAY 04	NO.DPTH 25	WND-DIR 240	WW-CODE 50	
LON 49-585W	HR 00.0	W-COLOR	WND-SPD 12	CLD-TPE 7	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1014.8	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
000	0000	213	3660		2565	15275				003	
000	0009	2116	3654	498	2564	15272				003	
000	0028	2020	3657	497	2592	15250				003	
000	0070	1934	3660	502	2617	15234				003	
000	0094	1905	3660	457	2625	15229				003	
000	0140	1832	3654	477	2639	15216				003	
000	0187	1798	3651	470	2645	15213				003	
000	0234	1776	3654	472	2653	15215				004	
000	0281	1759	3650	482	2654	15217				003	
000	0374	1735	3646	477	2657	15225				003	
000	0467	1731	3645	491	2657	15239				003	
000	0562	1672	3631	458	2660	15235					
000	0758	1365	3579	397	2689	15165				008	
018	0990	0815	3511	371	2736	15000				019	
018	1188	0542	3504	487	2768	14925				016	
018	1498	0443	3500	578	2776	14935				015	
018	1991	0384	3499	569	2782	14994				015	
018	2486	0356	3499	599	2784	15067				018	
018	2989	0314	3496	589	2786	15135				021	
018	3490	0273	3494	600	2788	15205				028	
049	3980	0242	3492	599	2789	15277				031	
049	4802	0231	3491	573	2790	15418					
049	5000	0230	3490	579	2789	15453					
049	5200	0230	3490	579	2789	15489					
049	5400	0227	3489	570	2788	15524					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2130	3660		2565	15275	0000	00000	2351
0010	2112	3654		2565	15271	0024	00001	2351
0020	2064 C	3655		2579	15260	0047	00005	2226
0030	2013	3657		2594	15248	0068	00010	2082
0050	1961 C	3659		2609	15238	0109	00027	1944
0075	1928	3660		2619	15233	0157	00057	1862
0100	1895	3659		2627	15227	0203	00099	1797
0125	1855	3656		2635	15220	0247	00150	1731
0150	1823	3653		2640	15214	0290	00210	1685
0175	1804	3651		2644	15213	0332	00281	1662
0200	1791	3652		2647	15213	0374	00361	1636
0225	1780	3654		2651	15214	0415	00450	1605

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1770	3653		2654	15216	0455	00548	1595
0300	1753	3649		2655	15218	0536	00776	1601
0400	1736	3646		2657	15229	0698	01359	1614
0500	1717	3641		2657	15240	0862	02118	1639
0600	1628 B	3622		2664	15227	1026	03042	1602
0700	1476 B	3596		2678	15193	1181	04080	1483
0800	1264 F	3565		2698	15136	1322	05157	1296
1000	0797	3510		2738	14994	1543	07162	0890
1200	0534	3504		2769	14923	1691	08802	0569
1500	0443	3500		2776	14936	1854	11057	0504
2000	0383	3499		2782	14995	2103	15524	0475
2500	0355	3499		2785	15069	2344	21141	0475
3000	0313	3496		2786	15137	2585	27976	0468
3500	0272	3494		2788	15206	2819	35842	0448
4000	0241	3492		2789	15281	3046	44646	0437
4500	0231	3492		2790	15365	3273	54646	0446
5000	0230	3490		2789	15454	3510	66358	0475

C-REF-NO 009	YR 1964	DEPTH 5063	WAVES 1 2522	AIR T 22.5	VIS 5
CONS. NO 002	MONTH 6	MXSAMPD 52	WAVES 2 2623	WET B 21.0	STN
LAT 36-504N	DAY 04	NO.DPTH 25	WND-DIR 250	WW-CODE 63	
LON 48-440W	HR 13.5	W-COLOR	WND-SPD 12	CLD-TPE 7	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1015.2	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
135	0000	208	3657		2576	15261					
135	0009	2073	3663	522	2583	15262					
135	0028	1881	3655	560	2627	15211					
135	0070	1761	3646	504	2650	15183					
135	0094	1748	3648	509	2655	15183					
135	0141	1742	3646	514	2655	15189					
135	0189	1728	3644	504	2657	15192					
135	0236	1716	3644	499	2660	15196					
135	0284	1716	3646	498	2661	15205					
135	0379	1708	3642	498	2660	15217					
135	0476	1698	3641	490	2662	15230					
135	0573	1684	3642	507	2666	15242					
135	0769	1414	3585	422	2683	15183					
151	0896	1126	3544	361	2709	15102					
151	1089	0771	3517	346	2747	15000					
151	1385	0526	3509	533	2774	14952					
151	1858	0403	3499	593	2780	14979					
151	2322	0362	3497	616	2782	15041					
151	2820	0324	3496	597	2785	15110					
151	3340	0280	3495	589	2789	15182					
173	4050	0237	3491	601	2789	15287					
173	4452	0228	3491	589	2790	15355					
173	4853	0229	3490	585	2789	15427					
173	5049	0228	3489	582	2788	15461					
173	5250	0228	3489	576	2788	15497					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2080	3657		2576	15261	0000	00000	2242
0010	2065 B	3663		2585	15260	0022	00001	2164
0020	1971 G	3660		2607	15236	0043	00004	1952
0030	1869	3654		2630	15208	0062	00009	1745
0050	1784 F	3649		2647	15186	0095	00023	1591
0075	1756	3646		2652	15182	0135	00048	1551
0100	1747	3648		2655	15184	0173	00083	1525
0125	1743	3647		2656	15186	0212	00127	1531
0150	1740	3646		2655	15189	0251	00182	1543
0175	1732	3645		2656	15191	0290	00247	1543
0200	1725	3644		2658	15193	0328	00321	1538
0225	1718	3644		2659	15195	0367	00406	1531

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1716	3645		2660	15199	0406	00500	1528
0300	1715	3646		2661	15207	0483	00718	1537
0400	1706	3642		2660	15220	0640	01284	1578
0500	1698	3642		2662	15234	0800	02024	1590
0600	1663	3637		2667	15240	0960	02927	1578
0700	1540 B	3610 B		2675	15215	1116	03972	1523
0800	1346 B	3574		2689	15165	1264	05105	1393
1000	0919	3526		2731	15042	1504	07283	0979
1200	0650 E	3512		2760	14971	1672	09157	0681
1500	0477 D	3506		2777	14951	1853	11631	0507
2000	0386 B	3498		2781	14996	2105	16173	0486
2500	0348	3497		2783	15066	2352	21897	0482
3000	0308	3496		2786	15135	2593	28734	0462
3500	0268	3494		2789	15205	2824	36488	0441
4000	0239	3491		2789	15280	3049	45239	0438
4500	0228	3491		2790	15364	3275	55228	0444
5000	0228	3489		2788	15453	3512	66941	0477

C-REF-NO 009	YR 1964	DEPTH 5139	WAVES 1 2522	AIR T 21.5	VIS 6
CONS. NO 003	MONTH 6	MXSAMPD 53	WAVES 2 2222	WET B 20.2	STN
LAT 36-146N	DAY 05	NO.DPTH 25	WND-DIR 250	WW-CODE 61	
LON 47-315W	HR 02.2	W-COLOR	WND-SPD 07	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1016.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
057	0000	207	3652		2575	15258					
057	0047	1772	3654	538	2654	15183				005	
057	0095	1734	3651	509	2661	15179				005	
057	0142	1724	3647	508	2660	15184				004	
057	0190	1725	3648	510	2661	15192				005	
057	0238	1723	3648	512	2661	15199				004	
057	0285	1720	3648	513	2662	15206				004	
057	0381	1692	3642	502	2664	15213				004	
057	0478	1576	3616	457	2671	15190				005	
057	0574	1401	3585	410	2686	15147				008	
057	0672	1285	3571	402	2699	15123				010	
045	0789	0952	3526	337	2726	15020				017	
045	0891	0829	3520	328	2741	14990				018	
045	0992	0688	3517	438	2759	14952				016	
045	1192	0579	3518	500	2774	14942				016	
045	1492	0454	3506	580	2780	14940				015	
045	1992	0379	3499	612	2782	14992				016	
045	2493	0338	3498	616	2785	15060				018	
045	2995	0301	3497	604	2788	15131				023	
022	3606	0256	3493	608	2789	15218				028	
022	4100	0233	3492	599	2790	15295				034	
022	4614	0228	3490	587	2789	15383				038	
022	4913	0228	3491	580	2790	15437				041	
022	5103	0229	3490	565	2789	15471				041	
022	5306	0230	3490	585	2789	15508				043	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2070	3652		2575	15258	0000	00000	2253
0010	2003 D	3653		2593	15242	0022	00001	2082
0020	1943 G	3653		2610	15227	0042	00004	1931
*0030	1889 I	3653		2624	15213	0061	00009	1800
0050	1765 B	3654		2655	15182	0094	00022	1508
0075	1732 E	3653		2663	15176	0131	00046	1448
0100	1732	3651		2661	15180	0168	00079	1473
0125	1725	3648		2661	15181	0205	00122	1482
0150	1724	3647		2660	15185	0243	00175	1496
0175	1724	3648		2660	15189	0281	00238	1502
0200	1725	3648		2661	15194	0319	00311	1508
0225	1724	3648		2661	15197	0357	00394	1514

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SV4
0250	1723	3648		2661	15201	0395	00488	1519
0300	1719	3648		2662	15208	0472	00705	1530
0400	1675	3638		2665	15210	0626	01260	1533
0500	1536 B	3608		2674	15181	0777	01958	1465
0600	1374 D	3582		2689	15142	0919	02757	1345
0700	1206 F	3560		2706	15099	1047	03609	1190
0800	0935 B	3525		2727	15015	1157	04448	0976
1000	0681	3517		2760	14950	1322	05946	0658
1200	0575	3518		2775	14942	1442	07290	0525
1500	0452	3506		2780	14940	1594	09392	0474
2000	0378	3499		2782	14993	1834	13708	0468
2500	0337	3498		2785	15061	2069	19164	0456
3000	0301	3497		2788	15132	2298	25664	0442
3500	0263	3494		2789	15203	2522	33204	0435
4000	0236	3492		2790	15279	2743	41790	0427
4500	0228	3490		2789	15364	2968	51720	0448
5000	0228	3491		2789	15453	3204	63370	0468

C-REF-NO 009	YR 1964	DEPTH 5011	WAVES 1 2322	AIR T 21.5	VIS 8
CONS. NO 004	MONTH 6	MXSAMPD 52	WAVES 2 2523	WET B 20.6	STN
LAT 35-375N	DAY 05	NO.DPTH 25	WND-DIR 230	WW-CODE 80	
LON 46-150W	HR 12.7	W-COLOR	WND-SPD 09	CLD-TPE 6	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1016.4	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
165	0000	209	3648		2567	15263				003	
165	0049	1776	3651	540	2650	15184					
165	0098	1704	3639	511	2659	15170					
165	0147	1709	3647	512	2664	15180				004	
165	0196	1684	3643	506	2667	15180					
165	0245	1640	3631	501	2668	15174					
165	0294	1596	3621	494	2670	15167					
165	0393	1480	3600	485	2680	15144				006	
165	0491	1337	3575	425	2692	15111					
165	0587	1147	3548	368	2708	15059					
165	0684	0919	3522	357	2728	14990					
165	0781	0747	3514	407	2748	14939					
165	0880	0656	3511	458	2759	14920					
151	0935	0614	3511	493	2764	14912					
151	1120	0522	3509	539	2774	14906					
151	1400	0430	3501	598	2778	14914					
151	1890	0378	3499	611	2782	14974					
151	2381	0338		612							
151	2880	0291	3496	621	2788	15107					
127	3567	0241		606							
127	4068	0225	3490	593	2789	15285					
127	4567	0225		590							
127	4766	0228	3488	590	2787	15410					
127	4962	0230	3488	596	2787	15446					
127	5168	0232	3485	593	2785	15484					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2090	3648		2567	15263	0000	00000	2333
0010	2019 C	3647		2585	15245	0023	00001	2160
0020	1954 E	3647		2602	15229	0044	00004	2005
*0030	1896 G	3646 B		2616	15215	0063	00009	1870
0050	1773	3651		2651	15183	0098	00023	1549
0075	1718 D	3644		2660	15171	0136	00047	1476
0100	1704	3639		2659	15170	0173	00081	1489
0125	1704 B	3643		2662	15174	0210	00124	1471
0150	1708	3647		2664	15180	0247	00176	1460
0175	1698	3646		2666	15181	0284	00237	1452
0200	1681	3642		2667	15180	0320	00308	1449
0225	1659	3636		2667	15177	0357	00387	1451

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1636	3630		2668	15173	0394	00477	1452
0300	1590	3620		2671	15166	0466	00682	1439
0400	1471	3598		2681	15143	0608	01190	1368
0500	1321	3573		2693	15107	0741	01803	1273
0600	1116	3544		2711	15050	0862	02480	1111
0700	0886	3520		2732	14980	0964	03156	0907
0800	0725	3513		2751	14934	1046	03787	0722
1000	0576	3511		2769	14908	1175	04963	0552
1200	0491	3507		2776	14906	1280	06149	0487
1500	0413 B	3500		2779	14923	1425	08157	0464
2000	0369	3499		2783	14989	1659	12376	0457
2500	0327	3497		2786	15057	1889	17709	0446
3000	0280	3495		2789	15123	2110	23991	0422
3500	0245	3493		2790	15195	2324	31163	0412
4000	0226	3490		2789	15274	2538	39489	0423
4500	0224	3489		2788	15362	2763	49441	0454
5000	0231	3487		2786	15453	3008	61545	0497

C-REF-NO 009 YR 1964 DEPTH 4480 WAVES 1 2722 AIR T 22.4 VIS 8
 CONS. NO 005 MONTH 6 MXSAMPD 40 WAVES 2 2623 WET B 20.2 STN
 LAT 35-050N DAY 06 NO.DPTH 24 WND-DIR 270 WW-CODE 01
 LON 44-575W HR 02.3 W-COLOR WND-SPD 10 CLD-TPE 6
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1015.5 CLD-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
056	0000	224									
056	0050	1938	3658	548	2615	15231				003	
056	0100	1812	3654	497	2644	15203				004	
056	0150	1760	3647	490	2651	15196				003	
056	0200	1724	3643	505	2657	15193				004	
056	0250	1725		516						003	
056	0300	1713	3643	502	2660	15206				003	
056	0400	1705	3645	523	2663	15220				003	
056	0500	1610	3626	496	2671	15206				005	
056	0600	1473		487						005	
045	0690	1297	3573	416	2698	15130				009	
045	0785	1116	3549	373	2715	15081				012	
045	0886	0937	3531	378	2732	15031				014	
045	0980	0753	3523	413	2754	14976				020	
045	1175	0591	3514	493	2770	14943				017	
045	1467	0453	3503	596	2777	14935				015	
045	1966	0387	3500	600	2782	14991				017	
023	2440	0343	3496	588	2783	15053				022	
045	2465	0342	3497	616	2784	15057				021	
023	2880	0304	3497	589	2788	15112				025	
023	3385	0267	3493	586	2788	15184				031	
023	3605	0251	3492	584	2789	15215				034	
023	3815	0240	3493	581	2790	15248				036	
023	4007	0234		581						037	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2240	3663 C		2536	15303	0000	00000	2623
0010	2173 B							
0020	2111 C							
*0030	2054 D							
0050	1938	3658		2615	15231	0114	00024	1894
0075	1859 B	3656		2633	15213	0159	00053	1729
0100	1812	3654		2644	15203	0202	00091	1635
0125	1780	3651		2649	15198	0242	00138	1594
0150	1760	3647		2651	15196	0282	00195	1580
0175	1739	3645		2655	15193	0322	00260	1556
0200	1724	3643		2657	15193	0361	00336	1542
0225	1723	3642		2657	15196	0400	00421	1553

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1725	3642		2656	15201	0439	00517	1567
0300	1713	3643		2660	15206	0518	00738	1551
0400	1705	3645		2663	15220	0674	01301	1551
0500	1610	3626		2671	15206	0828	02012	1503
0600	1473	3599		2681	15176	0976	02846	1426
0700	1278	3570		2700	15125	1112	03747	1256
0800	1090	3546		2717	15074	1230	04659	1096
1000	0728 B	3522		2757	14969	1412	06295	0695
1200	0575	3513		2771	14941	1539	07722	0561
1500	0445	3503		2778	14937	1699	09926	0489
2000	0384	3500		2782	14996	1942	14316	0471
2500	0338	3496		2784	15061	2182	19871	0468
3000	0295	3496		2788	15129	2413	26429	0438
3500	0258	3492		2788	15200	2637	33963	0437
4000	0234							

C-REF-NO 009	YR 1964	DEPTH 4638	WAVES 1 3021	AIR T 21.5	VIS 7
CONS. NO 006	MONTH 6	MXSAMPD 39	WAVES 2 2922	WET B 17.5	STN
LAT 35-395N	DAY 06	NO.DPTH 24	WND-DIR 300	WW-CODE 02	
LON 44-579W	HR 09.6	W-COLOR	WND-SPD 09	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1015.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SID	PH
096	0000	217	3641		2539	15283				004	
096	0047	1815	3639	502	2632	15194					
096	0094	1740	3639	512	2650	15180					
096	0142	1734	3640	512	2652	15186					
096	0189	1721	3633	510	2650	15189					
096	0237	1714		510							
096	0284	1700		507							
096	0380	1611		472							
096	0477	1446	3603	465	2690	15148					
096	0574	1281	3577	416	2705	15106					
104	0574	1272	3551	416	2686	15100					
104	0669	1084	3520	358	2698	15047					
104	0741	0905	3507	361	2718	14992					
104	0818	0774	3501	404	2734	14954					
104	0972	0603	3500	482	2757	14913					
104	1200	0501	3501	548	2770	14909					
104	1594	0390	3497	609	2779	14929					
104	1997	0363	3495	614	2781	14986					
125	2432	0331	3496	612	2785	15047					
125	2878	0297	3497	601	2789	15109					
125	3320	0259	3494	604	2790	15169					
125	3510	0244	3492	599	2789	15196					
125	3695	0234	3492	594	2790	15224					
125	3881	0229	3493	594	2791	15255					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2170	3641		2539	15283	0000	00000	2594
0010	2087 D	3641		2562	15263	0025	00001	2385
0020	2013 F	3640		2581	15245	0048	00005	2201
*0030	1946 I	3640		2599	15228	0069	00010	2040
0050	1805	3639		2634	15191	0107	00025	1710
0075	1749 D	3639		2648	15179	0149	00052	1589
0100	1738	3639		2651	15180	0188	00087	1566
0125	1732 B	3640		2653	15183	0228	00133	1558
0150	1732	3639		2652	15186	0267	00188	1572
0175	1725	3636		2651	15188	0307	00255	1591
0200	1719	3636 B		2653	15190	0347	00332	1585
0225	1716	3634 B		2652	15193	0387	00419	1596

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1711	3632 B		2652	15196	0428	00518	1608
0300	1691	3628 B		2653	15197	0509	00747	1608
0400	1580	3616 B		2670	15179	0664	01304	1480
0500	1409	3599		2695	15139	0803	01938	1262
0600	1231	3561 B		2702	15092	0927	02641	1207
0700	1005 B	3512		2706	15022	1047	03441	1165
0800	0800	3502		2731	14961	1153	04248	0920
1000	0585 B	3500		2759	14910	1311	05682	0642
1200	0501	3501		2770	14909	1431	07032	0544
1500	0409	3498		2778	14921	1585	09163	0471
2000	0363	3495		2781	14986	1826	13505	0475
2500	0326	3496		2785	15056	2062	18969	0451
3000	0287	3497		2789	15126	2285	25296	0423
3500	0245	3492		2789	15194	2500	32526	0417

C-REF-NO 009	YR 1964	DEPTH 4832	WAVES 1 2523	AIR T 21.4	VIS 7
CONS. NO 007	MONTH 6	MXSAMPD 47	WAVES 2 2625	WET B 18.0	STN
LAT 36-200N	DAY 06	NO.DPTH 22	WND-DIR 250	WW-CODE 80	
LON 45-000W	HR 17.9	W-COLOR	WND-SPD 11	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1011.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
179	0000	211	3632		2549	15266					
179	0050	1858	3624	563	2609	15205				003	
179	0099	1621	3620	521	2664	15142				004	
179	0148	1485	3602	500	2681	15106				005	
179	0198	1445	3596	487	2685	15101				005	
179	0247	1387	3583	464	2687	15088				006	
179	0297	1320	3572	427	2693	15073				007	
179	0396	1199	3552	388	2701	15046				010	
179	0495	1024	3532	357	2718	14998				014	
179	0593	0868	3518	370	2733	14955				017	
179	0692	0741	3514	418	2749	14922				016	
196	0775	0638	3509	465	2759	14895				016	
196	0878	0586	3510	494	2767	14891				016	
196	0979	0559	3511	522	2771	14898				015	
196	1175	0483		561						014	
196	1458	0401	3503	610	2783	14912				014	
196	1944	0347		612						016	
196	2400	0312		630						015	
196	2869	0298		627						017	
196	3744	0236		590						033	
196	4174	0225		594						037	
196	4683	0230		595						037	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2110	3632		2549	15266	0000	00000	2501
0010	2052 B	3631		2564	15252	0024	00001	2359
0020	1996 C	3631		2579	15239	0048	00005	2227
*0030	1943 D	3630		2592	15226	0069	00010	2104
0050	1858	3624		2609	15205	0110	00027	1945
0075	1730 B	3623		2640	15172	0155	00056	1662
0100	1617	3620		2664	15141	0195	00090	1436
0125	1537	3611		2676	15119	0229	00130	1334
0150	1483	3602		2681	15106	0262	00177	1292
0175	1458 C	3598		2684	15101	0295	00231	1272
0200	1443	3596		2685	15100	0327	00292	1269
0225	1415	3589		2686	15094	0359	00362	1264
0250	1383	3582		2688	15087	0391	00440	1257
0300	1317	3571		2693	15072	0453	00616	1217

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1192	3551		2702	15044	0572	01044	1152
0500	1015	3531		2719	14996	0681	01543	1002
0600	0858	3518		2734	14952	0775	02071	0860
0700	0730	3513		2750	14919	0855	02597	0709
0800	0620	3509		2762	14892	0921	03105	0600
1000	0551	3511		2772	14898	1034	04144	0517
1200	0474	3509		2780	14900	1132	05245	0448
1500	0394							
2000	0342							
2500	0309							
3000	0289							
3500	0253 B							
4000	0228							
4500	0226							

C-REF-NO 009 YR 1964 DEPTH 5088 WAVES 1 3034 AIR T 19.5 VIS 7
 CONS. NO 008 MONTH 6 MXSAMPD 49 WAVES 2 2934 WET B 15.0 STN
 LAT 36-550N DAY 07 NO.DPTH 25 WND-DIR 300 WW-CODE 01
 LON 44-585W HR 03.0 W-COLOR WND-SPD 15 CLD-TPE 8
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1011.3 CLD-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
030	0000	205	3639		2571	15251					003	
030	0049	1814	3637	556	2630	15193						
030	0099	1684	3635	514	2661	15163						
030	0148	1618	3627	509	2670	15150					004	
030	0198	1591	3620	511	2671	15150						
030	0248	1546	3612	499	2675	15143						
030	0297	1501	3605	491	2680	15136						
030	0396	1392	3584	460	2687	15115					007	
030	0496	1243	3564	396	2702	15079						
030	0594	1056	3538	356	2717	15027						
030	0691	0882	3522	367	2734	14977						
030	0786	0718	3510	420	2749	14928						
040	0888	0641	3511	464	2761	14915						
040	0988	0580	3513	513	2770	14908						
040	1186	0480	3506	568	2777	14899						
040	1480	0402	3498	620	2779	14915						
040	1977	0361	3497	622	2782	14982						
040	2473	0331	3498	612	2786	15054						
061	2864	0298	3496	590	2788	15107						
061	3340	0264	3493	589	2788	15175						
061	3813	0235	3492	595	2790	15245						
061	4300	0228	3491	595	2790	15328						
061	4498	0228	3489	589	2788	15363						
061	4695	0229	3490	591	2789	15398						
061	4892	0231		594								

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2050	3639		2571	15251	0000	00000	2295
0010	1997	3639		2585	15238	0022	00001	2163
0020	1947 B	3639		2598	15226	0044	00004	2043
*0030	1900 B	3639		2610	15215	0064	00009	1934
0050	1811	3637		2631	15193	0101	00024	1737
0075	1735	3636		2649	15175	0142	00051	1575
0100	1682	3635		2661	15163	0181	00085	1472
0125	1643	3631		2667	15155	0217	00127	1419
0150	1617	3627		2670	15150	0253	00177	1400
0175	1602	3623		2671	15149	0288	00236	1401
0200	1589	3620		2671	15149	0323	00304	1407

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0225	1568	3616		2673	15146	0359	00381	1397
0250	1544	3612		2675	15143	0394	00467	1382
0300	1498	3604		2680	15135	0462	00661	1351
0400	1387	3583		2688	15113	0596	01141	1301
0500	1236	3563		2703	15077	0721	01715	1174
0600	1045	3537		2718	15023	0833	02342	1035
0700	0864	3521		2736	14972	0929	02980	0867
0800	0704	3510		2751	14925	1009	03594	0715
1000	0573	3513		2771	14907	1135	04744	0532
1200	0475	3506		2777	14899	1237	05894	0475
1500	0399	3498		2779	14917	1380	07873	0461
2000	0360	3497		2783	14985	1613	12075	0456
2500	0329	3498		2786	15058	1842	17387	0443
3000	0288	3495		2788	15126	2066	23759	0435
3500	0253	3493		2789	15198	2286	31171	0427
4000	0230	3492		2790	15276	2503	39585	0419
4500	0228	3490		2789	15364	2727	49467	0452

C-REF-NO 009 YR 1964 DEPTH 4956 WAVES 1 3133 AIR T 15.2 VIS 8
 CONS. NO 009 MONTH 6 MXSAMPD 49 WAVES 2 2835 WET B 11.3 STN
 LAT 37-310N DAY 07 NO.DPTH 23 WND-DIR 310 WW-CODE 03
 LON 45-000W HR 12.4 W-COLOR WND-SPD 15 CLD-TPE 8
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1018.4 CLD-AMT 6 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
124	0000	205	3655		2583	15253				003	
124	0049	1865	3656	538	2632	15210				002	
124	0098	1772	3650	500	2651	15191				003	
124	0148	1733	3646	504	2657	15187				003	
124	0197	1729	3646	510	2658	15194				002	
124	0247	1720	3645	510	2660	15200				003	
124	0296	1712	3645	510	2661	15205				003	
124	0395	1576	3615	452	2670	15177					
124	0495	1378	3581	416	2688	15126				007	
124	0591	1187	3555	376	2706	15074				011	
124	0690	0954	3528	356	2727	15004				015	
124	0786	0804	3502	390	2730	14961				016	
124	0881	0610	3503	463	2758	14901				017	
143	0940	0546	3498	508	2763	14884				016	
143	1137	0467	3500	562	2773	14885				015	
143	1433	0410	3498	601	2778	14911				015	
143	1914	0375	3498	612	2782	14977				015	
143	2362	0345	3498	602	2785	15041				018	
143	2817	0306	3497	601	2788	15102				023	
163	3330	0264	3494	602	2789	15173				026	
163	3823	0237	3492	605	2790	15248				032	
163	4356	0226	3491	599	2790	15337				037	
163	4942	0228	3491	594	2790	15442				040	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2050	3655		2583	15253	0000	00000	2180
0010	2008	3655		2594	15243	0021	00001	2075
0020	1968	3655		2605	15234	0042	00004	1980
*0030	1932 B	3655		2614	15226	0061	00009	1894
0050	1862	3656		2633	15210	0098	00024	1724
0075	1807	3653		2645	15197	0140	00051	1620
0100	1770	3650		2651	15190	0180	00087	1565
0125	1745	3648		2655	15187	0219	00132	1534
0150	1733	3646		2657	15187	0257	00186	1524
0175	1729	3646		2658	15190	0296	00250	1525
0200	1729	3646		2658	15194	0334	00324	1532
0225	1724	3645		2659	15197	0373	00409	1534
0250	1720	3645		2660	15200	0412	00503	1535

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1709	3644		2662	15205	0489	00721	1532
0400	1567	3613		2671	15174	0640	01263	1467
0500	1368	3580		2689	15123	0781	01909	1318
0600	1165	3553		2708	15068	0905	02607	1140
0700	0938	3525		2727	14999	1011	03311	0959
0800	0773 B	3502		2735	14951	1104	04025	0879
1000	0509 C	3497		2766	14879	1249	05340	0559
1200	0451	3500		2775	14889	1355	06531	0485
1500	0403	3498		2779	14919	1500	08539	0466
2000	0369	3498		2782	14989	1736	12792	0462
2500	0334	3498		2786	15060	1968	18189	0451
3000	0290	3496		2788	15127	2194	24587	0432
3500	0253	3493		2789	15198	2413	31937	0423
4000	0232	3492		2790	15277	2629	40365	0423
4500	0224	3491		2790	15362	2850	50121	0437
5000	0229	3491		2790	15454	3083	61613	0466

C-REF-NO 009	YR 1964	DEPTH 4910	WAVES 1 3234	AIR T 15.0	VIS 8
CONS. NO 010	MONTH 6	MXSAMPD 40	WAVES 2 2938	WET B 10.5	STN
LAT 38-000N	DAY 07	NO.DPTH 23	WND-DIR 320	WW-CODE 03	
LON 45-000W	HR 21.9	W-COLOR	WND-SPD 18	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1021.2	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
219	0000	195	3660		2613	15226				008	
219	0049	1875	3646	492	2622	15212					
219	0098	1791	3646	463	2643	15196					
219	0148	1758	3650	487	2654	15195				003	
219	0197	1732	3646	502	2657	15195					
219	0246	1729	3646	503	2658	15202					
219	0295	1634	3620	464	2661	15179					
219	0394	1378	3576	440	2684	15109				007	
219	0493	1231	3560	377	2701	15074					
219	0591	1022	3533	350	2719	15013					
219	0689	0826	3519	377	2740	14955					
219	0786	0695	3511	431	2753	14920					
*243	0793	0669	3513	451	2758	14911					
219	0883	0610	3510	477	2764	14902					
*243	0937	0563	3509	503	2769	14892					
*243	1150	0443	3500	573	2776	14877					
*243	1494	0398	3498	608	2779	14916					
*243	1881	0371	3497	608	2781	14970					
*243	2300	0343	3496	603	2783	15029					
*243	2705	0309	3496	605	2787	15084					
*243	3143	0276	3495	601	2789	15146					
*243	3567	0246	3491	599	2788	15206					
*243	4029	0231	3492	602	2790	15281					

*MULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1950	3660		2613	15226	0000	00000	1891
0010	1931	3657		2616	15222	0019	00001	1871
0020	1913 B	3654		2618	15219	0038	00004	1851
*0030	1895 C	3651		2621	15215	0056	00009	1830
0050	1873	3646		2622	15211	0093	00024	1823
0075	1828	3645		2633	15203	0138	00052	1730
0100	1789	3646		2644	15196	0180	00090	1627
0125	1769	3648		2650	15194	0221	00137	1584
0150	1757	3650		2654	15195	0260	00193	1552
0175	1742	3648		2657	15194	0299	00258	1539
0200	1733	3646		2657	15196	0338	00332	1539
0225	1735 B	3647		2658	15200	0377	00417	1544

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1723	3644		2658	15201	0416	00512	1548
0300	1621	3617		2662	15175	0493	00731	1526
0400	1368	3575		2685	15106	0637	01243	1325
0500	1217	3558		2703	15070	0763	01822	1174
0600	1002	3531		2721	15007	0873	02438	1000
0700	0807	3518		2742	14949	0963	03038	0794
0800	0671 C	3512		2757	14912	1037	03599	0652
1000	0518	3506		2773	14884	1154	04667	0504
1200	0430 B	3499		2777	14880	1252	05772	0463
1500	0397	3498		2779	14917	1392	07719	0458
2000	0363	3497		2782	14987	1626	11949	0464
2500	0326	3496		2785	15056	1859	17372	0454
3000	0286	3496		2788	15126	2085	23770	0430
3500	0250	3492		2788	15197	2305	31165	0430
4000	0232	3492		2790	15277	2523	39628	0421

C-REF-NO 009	YR 1964	DEPTH 5011	WAVES 1 3222	AIR T 17.0	VIS 8
CONS. NO 011	MONTH 6	MXSAMPD 42	WAVES 2 3034	WET B 13.0	STN
LAT 38-395N	DAY 08	NO.DPTH 23	WND-DIR 300	WW-CODE 01	
LON 45-020W	HR 14.3	W-COLOR	WND-SPD 09	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1025.1	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
143	0000	172	3613		2635	15155					
143	0045	1602	3607	591	2658	15126				002	
143	0091	1497	3603	536	2679	15101				002	
143	0137	1396	3580	534	2683	15073				004	
143	0182	1330	3566	522	2686	15057				004	
143	0228	1335	3572	522	2690	15067				004	
143	0273	1284	3564	512	2694	15056				005	
143	0363	1233	3562	452	2702	15053				007	
143	0457	1006	3528	349	2718	14985				014	
143	0543	0798	3508	374	2736	14919				016	
143	0625	0676	3512	437	2757	14886				015	
143	0706	0587	3503	481	2761	14862				015	
143	0792	0519	3500	532	2767	14849				014	
143	0876	0489	3503	549	2773	14851				013	
143	1060	0444	3501	575	2777	14863				012	
162	1238	0410	3499	607	2779	14878				012	
162	1602	0373	3498	622	2782	14923				012	
162	1997	0350	3496	627	2783	14980				013	
162	2385	0331	3497	617	2785	15039				016	
162	2796	0300	3496	609	2787	15096				019	
162	3225	0266	3496	607	2791	15156				024	
162	3652	0237	3493	608	2791	15218				028	
162	4180	0227	3491	605	2790	15306				032	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1720	3613		2635	15155	0000	00000	1683
0010	1693	3613		2642	15149	0017	00001	1625
0020	1667	3613		2648	15143	0033	00003	1571
*0030	1642	3612		2653	15136	0048	00007	1522
0050	1590	3607		2661	15123	0078	00020	1453
0075	1532	3605		2673	15109	0114	00042	1348
0100	1476	3599		2680	15095	0147	00072	1282
0125	1421	3587		2683	15080	0179	00109	1266
0150	1372	3575		2684	15066	0211	00154	1262
0175	1337	3567		2686	15058	0242	00207	1253
0200	1331 C	3568		2687	15060	0274	00267	1243
0225	1334	3572		2689	15066	0305	00335	1231
0250	1312 B	3569		2692	15062	0336	00410	1215

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1274 D	3564		2696	15057	0396	00581	1187
0400	1154 D	3550		2708	15031	0511	00992	1090
0500	0897 B	3516		2727	14950	0613	01456	0916
0600	0708	3510		2751	14894	0693	01907	0683
0700	0593	3504		2761	14864	0757	02333	0585
0800	0515	3500		2768	14849	0813	02763	0521
1000	0457	3502		2776	14858	0912	03670	0453
1200	0416	3499		2779	14874	1003	04699	0444
1500	0380	3498		2781	14910	1137	06555	0434
2000	0350	3496		2783	14981	1361	10621	0450
2500	0323	3497		2786	15055	1589	15902	0443
3000	0284	3496		2789	15125	1809	22164	0422
3500	0246	3494		2791	15195	2021	29263	0405
4000	0229	3492		2791	15276	2231	37442	0416

C-REF-NO 009	YR 1964	DEPTH 4585	WAVES 1 2422	AIR T 16.7	VIS 8
CONS. NO 012	MONTH 6	MXSAMPD 47	WAVES 2 2835	WET B 14.0	STN
LAT 39-130N	DAY 08	NO.DPTH 23	WND-DIR 230	WW-CODE 03	
LON 45-005W	HR 22.4	W-COLOR	WND-SPD 10	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1024.3	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SID	PH
224	0000	182	3630		2623	15186				004	
224	0049	1576	3607	533	2664	15119					
224	0099	1498	3605	515	2680	15102					
224	0149	1444	3593	499	2683	15092				006	
224	0198	1396	3587	502	2689	15084					
224	0248	1321	3569	504	2690	15065					
224	0298	1298	3571	499	2696	15066					
224	0397	1188	3559	438	2709	15043				011	
224	0497	0951	3521	351	2722	14970					
224	0596	0776	3510	386	2741	14919					
224	0695	0621	3508	452	2761	14875					
224	0795	0550	3502	503	2765	14862					
224	0894	0502	3504	543	2773	14859					
224	0992	0444	3503	586	2778	14852					
224	1190	0430	3500	597	2778	14878					
*244	1498	0388	3500	609	2782	14913					
*244	2003	0360		609							
*244	2496	0329	3498	609	2786	15057					
*244	2993	0288	3494	624	2787	15125					
*244	3493	0254	3492	614	2788	15197					
*244	3977	0233		619							
*244	4501	0223		631							
*244	4697	0222	3490	640	2790	15396					

#MULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1820	3630		2623	15186	0000	00000	1793
0010	1768 B	3626		2633	15172	0018	00001	1703
0020	1719 D	3622		2642	15159	0034	00003	1622
*0030	1674 F	3619		2650	15147	0050	00008	1550
0050	1573	3607		2665	15118	0080	00020	1417
0075	1523 C	3605		2675	15106	0115	00042	1329
0100	1497	3605		2680	15102	0148	00071	1284
0125	1468	3599		2682	15096	0180	00108	1273
0150	1443	3593		2683	15092	0212	00154	1273
0175	1420	3590		2686	15088	0244	00207	1253
0200	1393	3586		2689	15083	0275	00267	1234
0225	1354 B	3577		2689	15073	0306	00335	1231

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1320	3569		2690	15065	0337	00411	1228
0300	1297	3571		2697	15066	0398	00582	1181
0400	1181	3558		2709	15041	0512	00990	1082
0500	0945	3520		2722	14969	0615	01464	0961
0600	0769	3510		2742	14917	0703	01956	0777
0700	0616	3508		2761	14874	0772	02412	0588
0800	0547	3502		2766	14862	0830	02856	0550
1000	0442	3503		2778	14852	0929	03763	0431
1200	0429	3500		2778	14880	1019	04783	0455
1500	0388	3500		2782	14913	1154	06652	0430
2000	0360	3500		2785	14986	1374	10636	0437
2500	0329	3498		2786	15058	1598	15849	0443
3000	0287	3494		2787	15126	1824	22278	0443
3500	0254	3492		2788	15198	2049	29826	0435
4000	0232	3490		2789	15277	2272	38486	0435
4500	0223	3490		2789	15361	2497	48428	0443

C-REF-NO 009 YR 1964 DEPTH 4261 WAVES 1 2233 AIR T 18.5 VIS 8
 CONS. NO 013 MONTH 6 MXSAMPD 44 WAVES 2 2733 WET B 15.0 STN
 LAT 39-415N DAY 09 NO.DPTH 23 WND-DIR 220 WW-CODE 03
 LON 45-000W HR 05.2 W-COLOR WND-SPD 12 CLD-TPE 8
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1021.2 CLO-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
052	0000	186	3639		2620	15199						
052	0047	1855	3634	522	2618	15204					002	
052	0094	1729	3646	520	2658	15177					003	
052	0142	1699	3647	510	2666	15176					004	
052	0189	1646	3631	505	2666	15166					004	
052	0237	1580	3618	502	2672	15152					005	
052	0284	1503	3606	488	2680	15135					005	
052	0377	1425	3596	473	2689	15124					005	
052	0469	1265	3568	431	2701	15082					009	
052	0559	1036	3534	368	2717	15013					014	
052	0649	0810	3510	361	2736	14941					018	
052	0739	0711	3515	439	2754	14919					016	
052	0828	0604	3508	490	2763	14890					016	
052	0918	0518	3501	539	2768	14869					015	
069	1222	0433	3504	586	2780	14886					014	
069	1516	0395	3499	614	2780	14918					014	
069	2000	0361	3498	612	2783	14986					016	
069	2496	0325	3497	619	2786	15055					018	
069	2977	0287	3495	615	2788	15122					021	
069	3470	0247	3493	618	2790	15190					025	
069	3952	0226	3492	618	2791	15266					029	
069	4149	0221	3492	629	2791	15298					026	
069	4354	0219	3492	643	2791	15334					020	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1860	3639		2620	15199	0000	00000	1823
0010	1852 D	3639		2622	15198	0018	00001	1810
0020	1844 G	3639		2624	15197	0036	00004	1795
*0030	1835 I	3638		2626	15197	0054	00008	1778
0050	1847	3635		2620	15203	0091	00023	1842
0075	1781 D	3641		2641	15189	0135	00051	1650
0100	1723	3647		2660	15177	0174	00086	1478
0125	1705 C	3648		2666	15176	0211	00129	1435
0150	1691	3645		2666	15175	0247	00180	1437
0175	1664	3637		2667	15170	0283	00240	1443
0200	1632	3628		2667	15163	0320	00310	1442
0225	1598	3621		2670	15156	0356	00389	1423
0250	1558	3614		2674	15147	0391	00476	1392
0300	1489 B	3604		2682	15133	0460	00669	1332

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1392	3590		2692	15116	0591	01138	1262
0500	1190 B	3556		2706	15060	0712	01695	1136
0600	0925 C	3521		2726	14978	0817	02284	0946
0700	0747 C	3512		2747	14926	0903	02851	0747
0800	0637	3511		2761	14899	0971	03376	0609
1000	0477 E	3500		2772	14866	1083	04400	0495
1200	0433 B	3503		2780	14882	1178	05464	0437
1500	0396	3499		2781	14916	1312	07335	0446
2000	0361	3498		2783	14986	1540	11453	0451
2500	0325	3497		2786	15056	1768	16745	0444
3000	0285	3495		2788	15125	1991	23098	0432
3500	0245	3493		2790	15195	2208	30354	0412
4000	0225	3492		2791	15274	2418	38529	0409

C-REF-NO 009	YR 1964	DEPTH 4435	WAVES 1 2222	AIR T 17.9	VIS 7
CONS. NO 014	MONTH 6	MXSAMPD 45	WAVES 2 2523	WET B 15.5	STN
LAT 40-100N	DAY 09	NO.DPTH 23	WND-DIR 200	WW-CODE 03	
LON 44-587W	HR 11.7	W-COLOR	WND-SPD 09	CLD-TPE 4	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1020.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
117	0000	163	3620		2662	15129					005	
117	0048	1558	3607	512	2668	15113						
117	0097	1428	3586	525	2681	15077						
117	0146	1449	3597	527	2685	15094					004	
117	0195	1401	3589	517	2689	15085						
117	0243	1438	3599	530	2689	15106						
117	0292	1435	3603	532	2693	15114						
117	0390	1354	3583	519	2694	15101					006	
117	0488	1270	3571	540	2702	15088						
117	0585	1120	3545	391	2711	15049						
117	0684	0843	3511	377	2731	14960						
117	0781	0682	3504	431	2750	14913						
117	0878	0571	3503	494	2763	14884						
117	0976	0526	3504	530	2770	14883						
117	1170	0445	3499	589	2775	14881						
132	1546	0387	3498	622	2781	14920						
132	2058	0356	3494	619	2780	14993						
132	2560	0327	3494	614	2783	15067						
132	3065	0289	3493	619	2786	15137						
132	3563	0250	3493	621	2790	15208						
132	4055	0224	3491	604	2790	15283						
132	4245	0223	3492	619	2791	15316						
132	4550	0219	3492	647	2791	15369						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1630	3620		2662	15129	0000	00000	1429
0010	1604 C	3615		2664	15122	0014	00001	1412
0020	1580 F	3610		2666	15116	0028	00003	1396
*0030	1558 H	3606 B		2668	15110	0042	00006	1381
0050	1552	3606		2669	15111	0070	00018	1377
0075	1481 D	3594		2676	15092	0104	00040	1321
0100	1428	3587		2681	15078	0137	00069	1274
0125	1435 E	3592		2684	15085	0169	00106	1259
0150	1445	3596		2685	15093	0200	00150	1252
0175	1420 C	3592		2688	15088	0232	00203	1237
0200	1404	3590		2689	15087	0263	00263	1230
0225	1422 C	3595		2689	15097	0294	00331	1239
0250	1440	3600		2689	15108	0325	00407	1244
0300	1430	3602		2693	15113	0388	00583	1226

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1347	3582		2695	15100	0511	01028	1229
0500	1257	3568		2703	15085	0633	01588	1175
0600	1078 C	3539		2714	15036	0747	02229	1077
0700	0811	3509		2735	14950	0845	02881	0868
0800	0656	3504		2753	14905	0924	03484	0689
1000	0515	3504		2771	14882	1046	04600	0520
1200	0437	3499		2776	14883	1147	05739	0476
1500	0390	3498		2780	14913	1288	07688	0448
2000	0358	3494		2781	14984	1522	11929	0473
2500	0331	3494		2783	15058	1763	17538	0475
3000	0294	3493		2786	15129	2001	24305	0459
3500	0255	3493		2789	15199	2228	31902	0426
4000	0226	3491		2790	15274	2444	40295	0417
4500	0219	3492		2791	15360	2659	49790	0421

C-REF-NO 009 YR 1964 DEPTH 4535 WAVES 1 0722 AIR T 16.0 VIS 4
 CONS. NO 015 MONTH 6 MXSAMPD 44 WAVES 2 0823 WET B 16.0 STN
 LAT 40-400N DAY 09 NO.DPTH 24 WND-DIR 060 WW-CODE 65
 LON 45-000W HR 17.6 W-COLOR WND-SPD 13 CLD-TPE 5
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1010.3 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
176	0000	175	3640		2648	15167					
176	0010	1746	3640	549	2649	15168				006	
181	0048	1744	3640	542	2650	15173				006	
181	0097	1693	3639	670	2661	15166				006	
186	0145	1654	3633	501	2666	15162				006	
186	0193	1580	3620	508	2673	15145				007	
186	0241	1505	3608	530	2681	15128				006	
186	0290	1441	3596	509	2686	15115				007	
191	0392	1440	3603	540	2691	15132				004	
191	0490	1335	3578	508	2694	15111				006	
197	0593	1172	3552	380	2706	15069				012	
197	0690	0913	3521	354	2728	14988				016	
209	0776	0752	3506	379	2741	14939				017	
209	0874	0589	3500	490	2759	14891				016	
209	0975	0510	3500	550	2768	14875				015	
209	1174	0457	3501	581	2775	14887				014	
209	1474	0406	3498	620	2779	14916				013	
221	1958	0366	3496	629	2781	14980				014	
#244	2402	0342	3496	615	2783	15046				016	
#244	2843	0311	3497	611	2787	15109				018	
#244	3313	0277	3494	599	2788	15176				021	
#244	3803	0242	3493	611	2790	15246				025	
#244	4108	0228	3492	611	2791	15294				025	
#244	4417	0219	3492	635	2791	15345				020	

#MULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1750	3640		2648	15167	0000	00000	1556
0010	1746	3640		2649	15168	0016	00001	1550
0020	1746	3640		2649	15169	0031	00003	1553
0030	1746 B	3640		2650	15171	0047	00007	1556
0050	1742	3640		2650	15173	0078	00020	1555
0075	1719 B	3640		2656	15170	0117	00045	1510
0100	1691	3639		2662	15166	0154	00078	1463
0125	1672	3636		2664	15164	0191	00121	1446
0150	1647	3632		2667	15160	0227	00172	1431
0175	1610	3625		2670	15152	0263	00231	1404
0200	1569	3618		2675	15143	0298	00299	1372

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0225	1529	3612		2679	15134	0332	00373	1340
0250	1491	3605		2682	15125	0366	00455	1314
0300	1439 B	3597		2687	15116	0431	00640	1284
0400	1434	3602		2692	15131	0560	01102	1266
0500	1323	3576		2695	15108	0687	01690	1254
0600	1154	3550		2708	15064	0808	02371	1140
0700	0892	3519		2730	14982	0912	03063	0926
0800	0707	3504		2746	14926	0998	03718	0763
1000	0499	3500		2770	14875	1128	04900	0524
1200	0451	3501		2776	14889	1230	06046	0479
1500	0403	3498		2779	14919	1373	08043	0466
2000	0364	3496		2781	14987	1611	12336	0469
2500	0335	3496		2784	15060	1849	17859	0465
3000	0300	3496		2788	15131	2081	24456	0446
3500	0263	3494		2789	15202	2307	32037	0436
4000	0232	3492		2791	15277	2526	40543	0419

C-REF-NO 009 YR 1964 DEPTH 4435 WAVES 1 0334 AIR T 16.7 VIS 7
 CONS. NO 016 MONTH 6 MXSAMPD 45 WAVES 2 2035 WET B 15.5 STN
 LAT 40-409N DAY 10 NO.DPTH 23 WND-DIR 030 WW-CODE 58
 LON 45-513W HR 07.6 W-COLOR WND-SPD 12 CLD-TPE 8
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1009.2 CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
076	0000	160	3558		2621	15112						
076	0048	1581	3575	548	2639	15116					004	
076	0095	1660	3623	473	2657	15154					005	
076	0143	1499	3594	472	2672	15109					006	
076	0190	1406	3578	484	2679	15085					006	
076	0238	1290	3555	495	2686	15051					007	
076	0285	1218	3545	508	2692	15033					008	
076	0380	1170	3551	388	2706	15033					012	
076	0476	0944	3522	334	2724	14964					018	
076	0571	0770	3506	386	2739	14912					018	
076	0667	0590	3497	472	2756	14856					019	
076	0763	0520	3501	550	2768	14844					017	
076	0859	0486	3500	571	2771	14846					016	
076	0955	0475	3504	571	2776	14858					016	
076	1150	0432		579							016	
091	1651	0371	3496	626	2781	14931						
091	2153	0352	3497	612	2783	15008						
091	2651	0318	3496	609	2786	15079						
091	3153	0283	3495	620	2788	15150						
091	3653	0246	3492	619	2789	15222						
091	4149	0224	3491	619	2790	15299						
091	4356	0217	3492	629	2792	15333						
091	4541	0217	3492	637	2792	15366						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1600	3558		2621	15112	0000	00000	1815
0010	1614 F	3567 B		2625	15119	0018	00001	1781
0020	1624 I	3575 C		2629	15125	0036	00004	1748
*0030	1632 I	3583 E		2633	15130	0053	00008	1715
0050	1586	3578		2639	15118	0087	00022	1658
0075	1635 G	3605 B		2649	15141	0128	00048	1572
0100	1647 C	3622		2659	15151	0166	00082	1490
0125	1570 F	3609 B		2667	15130	0203	00125	1419
0150	1484	3591		2673	15105	0238	00174	1369
0175	1433 B	3583		2677	15092	0272	00231	1334
0200	1381	3573		2681	15077	0306	00295	1306
0225	1320	3561		2684	15060	0338	00366	1280
0250	1268	3551		2687	15045	0370	00444	1255
0300	1212 D	3546		2694	15034	0432	00619	1201

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1128 C	3546		2710	15021	0547	01028	1071
0500	0898	3517		2727	14951	0647	01486	0908
0600	0710 B	3502		2744	14893	0730	01954	0746
0700	0558 B	3498		2761	14849	0797	02398	0581
0800	0503	3501		2770	14844	0852	02820	0503
1000	0466	3502 B		2775	14862	0951	03729	0471
1200	0423	3501 B		2779	14877	1043	04773	0441
1500	0383	3498 B		2781	14911	1177	06632	0437
2000	0356	3497		2782	14984	1404	10739	0455
2500	0329	3496		2785	15058	1636	16125	0455
3000	0294	3495		2788	15129	1864	22627	0442
3500	0257	3493		2789	15200	2088	30128	0430
4000	0229	3491		2790	15276	2307	38636	0424
4500	0217	3492		2791	15359	2523	48166	0418

C-REF-NO 009 YR 1964 DEPTH 4224 WAVES 1 0623 AIR T 18.0 VIS 8
 CONS. NO 017 MONTH 6 MXSAMPD 43 WAVES 2 1835 WET B 17.0 STN
 LAT 40-405N DAY 10 NO.DPTH 23 WND-DIR 060 WW-CODE 03
 LON 46-395W HR 14.2 W-COLOR WND-SPD 07 CLD-TPE 3
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1014.7 CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
142	0000	166	3567		2614	15132						
142	0049	1705	3594	544	2624	15156					004	
142	0097	1526	3592	476	2664	15109					006	
142	0145	1431	3587	530	2681	15086					005	
142	0194	1310	3559	498	2685	15051					007	
142	0242	1239	3551	492	2693	15034					008	
142	0291	1187	3552	350	2704	15025					013	
142	0387	0898	3518	343	2728	14932					019	
142	0485	0684	3498	430	2745	14864					018	
142	0582	0549	3494	506	2759	14825					017	
142	0680	0533	3503	522	2768	14836					016	
142	0777	0505	3506	551	2774	14841					015	
142	0877	0451	3500	584	2775	14835					014	
142	0976	0441	3501	594	2777	14847					014	
142	1173	0414	3501	612	2780	14869					015	
155	1543	0369	3496	625	2781	14912					015	
155	2038	0345	3497	622	2784	14985					017	
155	2527	0310	3496	626	2787	15054					019	
155	3018	0274	3494	630	2788	15123					021	
155	3520	0234	3493	625	2791	15193					025	
155	3909	0224	3494	626	2793	15257					027	
155	4105	0222	3492	640	2791	15291					025	
155	4300	0218	3492	648	2791	15324					022	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1660	3567		2614	15132	0000	00000	1882
0010	1665 E	3573		2618	15135	0019	00001	1852
0020	1666 I	3578		2621	15138	0037	00004	1820
*0030	1665 I	3583		2625	15140	0055	00008	1787
0050	1702	3594		2625	15156	0092	00023	1796
0075	1617 F	3595		2646	15134	0134	00050	1607
0100	1519	3592		2666	15108	0173	00084	1424
0125	1467 B	3591		2676	15095	0207	00124	1332
0150	1418	3584		2682	15083	0240	00171	1285
0175	1355 B	3570		2684	15065	0272	00225	1269
0200	1299	3557		2686	15048	0304	00286	1259
0225	1260	3552		2689	15039	0336	00354	1227
0250	1232	3551		2694	15033	0366	00428	1187
0300	1164 C	3550		2706	15018	0423	00590	1085

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0865	3515		2731	14922	0521	00936	0855
0500	0657	3496		2747	14855	0600	01294	0698
0600	0542 B	3495		2761	14826	0664	01652	0567
0700	0529	3504		2770	14838	0717	02010	0497
0800	0492	3505		2774	14840	0766	02382	0458
1000	0438	3501		2778	14850	0856	03220	0438
1200	0410	3501		2780	14872	0944	04212	0426
1500	0373	3497		2781	14906	1075	06040	0436
2000	0346	3497		2784	14980	1298	10058	0439
2500	0312	3496		2786	15050	1520	15211	0432
3000	0275	3494		2788	15121	1738	21418	0424
3500	0235	3493		2791	15191	1948	28453	0396
4000	0223	3493		2792	15273	2151	36372	0399

C-REF-NO 009 YR 1964 DEPTH 3365 WAVES 1 0922 AIR T 17.0 VIS 6
 CONS. NO 018 MONTH 6 MXSAMPD 31 WAVES 2 1224 WET B 17.0 STN
 LAT 40-421N DAY 10 NO.DPTH 21 WND-DIR 130 WW-CODE 55
 LON 47-325W HR 22.2 W-COLOR WND-SPD 13 CLD-TPE 7
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1016.9 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2 NO3	SID	PH
222	0000	186	3626		2610	15197				
222	0048	1812	3617	515	2616	15190			004	
222	0093	1588	3602	512	2658	15129			005	
222	0141	1434	3578	527	2673	15086			004	
222	0189	1366	3572	442	2683	15071			008	
222	0235	1280	3558	439	2690	15048			008	
222	0282	1191	3544	472	2697	15023			009	
222	0378	0938	3518	357	2722	14946			016	
222	0475	0776	3510	370	2741	14899			018	
222	0569	0675	3509	440	2754	14876			016	
222	0654	0579	3507	492	2766	14851			016	
222	0739	0504	3499	536	2768	14834			014	
222	0831	0464	3500	581	2774	14833			014	
222	0921	0455	3502	578	2776	14844			015	
222	1108	0408	3498	609	2778	14855				
*240	1433	0373	3496	619	2780	14895				
*240	1846	0357	3498	610	2784	14958				
*240	2280	0323	3495	629	2785	15017				
*240	2765	0288	3495	624	2788	15085				
*240	2957	0271	3494	624	2789	15111				
*240	3150	0253	3494	636	2790	15137				

*MULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1860	3626		2610	15197	0000	00000	1918
0010	1845 D	3625		2613	15195	0019	00001	1895
0020	1828 H	3623		2616	15191	0038	00004	1869
*0030	1809 I	3621		2620	15187	0057	00009	1840
0050	1803	3617		2617	15188	0094	00024	1868
0075	1683 E	3609		2641	15156	0138	00052	1655
0100	1560	3598		2661	15121	0178	00087	1467
0125	1476	3586		2670	15097	0214	00129	1388
0150	1419 B	3577		2676	15082	0248	00177	1343
0175	1383 B	3573		2681	15074	0281	00233	1300
0200	1346	3569		2685	15066	0314	00295	1266
0225	1300	3561		2689	15053	0345	00364	1236
0250	1253	3554		2692	15041	0376	00439	1211
0300	1144 C	3538		2701	15009	0435	00605	1130

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0895	3515		2726	14933	0538	00967	0897
0500	0747	3510		2745	14892	0620	01343	0730
0600	0639	3509		2759	14866	0687	01719	0598
0700	0535	3503		2767	14840	0743	02094	0518
0800	0473	3499		2772	14831	0794	02480	0477
1000	0436	3501		2778	14849	0886	03334	0438
1200	0394	3497		2779	14865	0974	04335	0433
1500	0370	3496		2781	14905	1106	06170	0434
2000	0346	3497		2784	14979	1328	10164	0437
2500	0308	3495		2786	15048	1549	15313	0434
3000	0267	3494		2789	15117	1765	21422	0410

C-REF-NO 009	YR 1964	DEPTH 3749	WAVES 1 1322	AIR T 19.0	VIS 6
CONS. NO 019	MONTH 6	MXSAMPD 38	WAVES 2 1523	WET B 18.0	STN
LAT 40-151N	DAY 11	NO.DPTH 22	WND-DIR 130	WW-CODE 51	
LON 47-246W	HR 04.6	W-COLOR	WND-SPD 08	CLD-TPE X	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1015.2	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
046	0000	183	3627		2619	15189						
046	0046	1744	3628	486	2641	15172					004	
046	0092	1754	3646	491	2652	15184					004	
046	0139	1637	3624	470	2663	15154					006	
046	0187	1503	3599	456	2675	15118					007	
046	0234	1425	3584	479	2680	15099					005	
046	0281	1294	3558	481	2687	15060					007	
046	0378	1177	3549	407	2703	15035					011	
046	0472	0948	3524	348	2725	14965					016	
046	0569	0727	3505	409	2744	14895					017	
046	0662	0604	3504	478	2760	14862					016	
046	0751	0557	3505	516	2767	14858					015	
046	0851	0514	3507	549	2774	14857					015	
046	0944	0444	3499	588	2775	14843					014	
046	1141	0411	3496	614	2776	14862					014	
061	1544	0374	3496	630	2780	14914					014	
061	2042	0348	3498	628	2784	14987					016	
061	2541	0305	3496	630	2787	15054					018	
061	3043	0262	3494	634	2789	15122					021	
061	3449	0225	3492	634	2791	15177					026	
061	3643	0216	3492	634	2792	15207					028	
061	3843	0210	3492	651	2792	15240					020	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1830	3627		2619	15189	0000	00000	1838
0010	1820 D	3630		2624	15188	0018	00001	1796
0020	1810 G	3633 B		2628	15187	0036	00004	1756
*0030	1799 I	3635 B		2632	15186	0054	00008	1718
0050	1745 B	3630		2642	15173	0087	00022	1635
0075	1752 D	3641		2648	15180	0128	00048	1582
0100	1739 B	3644		2654	15181	0167	00083	1538
0125	1679 B	3633		2660	15166	0205	00127	1488
0150	1605	3618		2666	15146	0242	00179	1437
0175	1535	3605		2672	15126	0278	00238	1387
0200	1481 B	3595		2676	15113	0312	00305	1354
0225	1440 B	3587		2679	15102	0346	00379	1333
0250	1381 B	3575		2682	15086	0379	00460	1305
0300	1268 D	3555		2690	15054	0444	00641	1245
0400	1128 B	3544		2708	15021	0561	01060	1088

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0879 B	3517		2731	14943	0660	01513	0876
0600	0677	3504		2750	14881	0740	01955	0689
0700	0579	3504		2763	14858	0803	02374	0563
0800	0537	3507		2770	14858	0857	02789	0503
1000	0426 C	3497		2776	14845	0954	03681	0453
1200	0404	3496		2777	14869	1046	04724	0455
1500	0377	3496		2780	14908	1183	06630	0447
2000	0350	3498		2784	14981	1407	10675	0437
2500	0309	3496		2787	15049	1627	15777	0427
3000	0266	3494		2789	15117	1840	21825	0408
3500	0222	3492		2791	15185	2042	28616	0383

C-REF-NO 009 YR 1964 DEPTH 4197 WAVES 1 1322 AIR T 19.0 VIS 4
 CONS. NO 020 MONTH 6 MXSAMPD 43 WAVES 2 1524 WET B 19.0 STN
 LAT 39-473N DAY 11 NO.DPTH 22 WND-DIR 140 WW-CODE 52
 LON 47-126W HR 10.8 W-COLOR WND-SPD 09 CLD-TPE 7
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1016.4 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
108	0000	174	3599		2619	15159						
108	0048	1640	3602	505	2646	15138					004	
108	0097	1482	3594	469	2675	15096					006	
108	0145	1446	3591	509	2681	15092					007	
108	0194	1413	3586	519	2684	15088					006	
108	0242	1355	3576	503	2689	15076					006	
108	0291	1344	3575	513	2690	15080					006	
108	0387	1179	3548	407	2702	15037					011	
108	0484	0979	3525	350	2720	14979					016	
108	0581	0762	3508	389	2741	14911					018	
108	0678	0624	3504	465	2757	14873					016	
108	0774	0499	3495	534	2766	14837					015	
108	0874	0483	3501	553	2772	14848					015	
108	0974	0463	3501	564	2775	14856					015	
108	1174	0419	3501	594	2780	14871						
123	1526	0385	3498	620	2781	14916						
123	2013	0357	3497	609	2783	14986						
123	2520	0320	3497	609	2786	15057						
123	3025	0278	3495	609	2789	15126						
123	3535	0235	3492	609	2790	15196						
123	4031	0219	3490	614	2790	15276						
123	4324	0217	3492	654	2792	15328						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1740	3599		2619	15159	0000	00000	1831
0010	1710 C	3599		2627	15152	0018	00001	1764
0020	1682 E	3600		2634	15145	0036	00004	1702
*0030	1655 G	3600		2640	15139	0052	00008	1645
0050	1633	3602		2647	15136	0085	00021	1585
0075	1549 D	3598		2663	15114	0123	00045	1437
0100	1478	3594		2676	15095	0158	00076	1325
0125	1454 B	3592		2680	15091	0191	00114	1294
0150	1443	3591		2681	15092	0223	00160	1290
0175	1427	3588		2683	15090	0256	00214	1281
0200	1405	3585		2685	15087	0288	00276	1270
0225	1374 B	3579		2687	15080	0320	00346	1254
0250	1353	3576		2689	15077	0351	00423	1244
0300	1333	3573		2691	15078	0414	00599	1238
0400	1154	3545		2704	15030	0533	01026	1127

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0941	3522		2724	14967	0638	01505	0946
0600	0731	3507		2745	14902	0723	01982	0743
0700	0590 B	3502		2760	14862	0791	02432	0598
0800	0489 B	3496		2768	14837	0847	02866	0519
1000	0457	3501		2775	14858	0947	03780	0463
1200	0415	3501		2780	14874	1037	04805	0432
1500	0386	3498		2781	14912	1170	06655	0441
2000	0358	3497		2783	14984	1398	10766	0453
2500	0322	3497		2786	15055	1625	16041	0439
3000	0280	3495		2789	15123	1845	22293	0423
3500	0238	3492		2790	15192	2057	29410	0405
4000	0219	3490		2790	15271	2267	37575	0414

C-REF-NO 009	YR 1964	DEPTH 4975	WAVES 1 1722	AIR T 20.0	VIS 7
CONS. NO 021	MONTH 6	MXSAMPD 50	WAVES 2 1524	WET B 19.2	STN
LAT 39-201N	DAY 11	NO.DPTH 25	WND-DIR 170	WW-CODE 03	
LON 47-011W	HR 17.3	W-COLOR	WND-SPD 10	CLD-TPE 0	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1015.2	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
173	0000	181	3594		2598	15179						
173	0048	1592	3612	524	2664	15124						
173	0093	1473	3600	525	2682	15093						
173	0140	1386	3583	517	2688	15070						
173	0188	1313	3565	517	2689	15052						
173	0235	1277	3563	488	2694	15047						
173	0282	1201	3550	442	2699	15028						
173	0377	1008	3530	360	2719	14973						
173	0470	0834	3512	370	2734	14921						
173	0566	0665	3501	433	2750	14870						
173	0650	0550	3497	501	2761	14837						
173	0739	0522	3502	532	2769	14841						
173	0834	0486	3502	566	2773	14842						
173	0925	0458	3500	581	2774	14846						
173	1120	0414	3498	611	2778	14860						
191	1590	0370	3496	625	2781	14920						
191	2050	0353	3497	611	2783	14991						
191	2500	0320	3496	613	2786	15054						
191	2966	0285	3494	609	2787	15119						
191	3450	0248	3493	609	2790	15187						
191	3936	0229	3491	606	2790	15264						
191	4426	0225	3489	605	2788	15349						
191	4628	0226	3490	599	2789	15385						
191	4825	0225	3490	599	2789	15420						
191	5016	0227	3491	599	2790	15455						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1810	3594		2598	15179	0000	00000	2031
0010	1761	3598		2614	15167	0020	00001	1887
0020	1714 B	3602		2628	15155	0038	00004	1757
*0030	1671 B	3605		2640	15144	0055	00008	1642
0050	1585	3612		2666	15123	0086	00020	1407
0075	1514	3607		2678	15104	0120	00042	1297
0100	1458	3598		2683	15089	0152	00071	1255
0125	1411	3589		2687	15077	0183	00107	1230
0150	1369	3579		2688	15066	0214	00151	1226
0175	1330	3569		2688	15056	0245	00202	1226
0200	1304	3564		2690	15051	0276	00262	1217
0225	1285	3563		2693	15048	0306	00328	1194

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1256	3559		2696	15042	0336	00401	1173
0300	1166	3546		2703	15018	0394	00563	1116
0400	0964	3525		2723	14960	0498	00931	0936
0500	0778	3508		2739	14904	0585	01331	0790
0600	0611	3499		2755	14854	0657	01734	0635
0700	0529 B	3500		2766	14837	0716	02125	0532
0800	0499	3502		2772	14842	0767	02520	0484
1000	0439	3499		2776	14850	0862	03398	0455
1200	0402	3497		2778	14868	0953	04425	0441
1500	0374	3496		2780	14907	1087	06290	0441
2000	0355	3497		2783	14983	1313	10383	0450
2500	0320	3496		2786	15054	1541	15673	0444
3000	0282	3494		2787	15124	1766	22050	0435
3500	0245	3493		2790	15195	1982	29333	0413
4000	0228	3491		2789	15275	2197	37680	0424
4500	0225	3489		2789	15362	2422	47598	0450
5000	0227	3491		2790	15453	2657	59199	0463

C-REF-NO 009 YR 1964 DEPTH 5150 WAVES 1 1723 AIR T 20.0 VIS 7
 CONS. NO 022 MONTH 6 MXSAMPD 52 WAVES 2 1525 WET B 19.0 STN
 LAT 38-484N DAY 12 NO.DPTH 25 WND-DIR 180 WW-CODE 20
 LON 47-153W HR 00.8 W-COLOR WND-SPD 18 CLD-TPE 8
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1013.9 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
008	0000	178	3591		2604	15170					
008	0047	1637	3605	523	2649	15137				006	
008	0094	1441	3592	516	2683	15082				005	
008	0141	1365	3574	514	2685	15063				008	
008	0189	1310	3564	518	2689	15051				006	
008	0238	1309	3566	513	2690	15059				007	
008	0274	1264	3561	488	2696	15049				008	
008	0380	1103	3545	386	2714	15009				013	
008	0476	0858	3517	358	2734	14932				018	
008	0569	0694		423						018	
008	0660	0568	3500	484	2761	14847				016	
008	0751	0544	3510	518	2772	14853				016	
008	0850	0490	3504	548	2774	14847				015	
008	0940	0465		568						014	
008	1133	0418	3498	601	2777	14864					
032	1503	0378	3496	623	2780	14909					
032	2012	0353	3496	611	2782	14984					
032	2481	0321	3496	606	2785	15051					
032	2987	0284	3494	602	2787	15122					
032	3460	0250	3493	597	2790	15190					
032	3930	0231	3492	594	2790	15264					
032	4400	0227		599							
032	4854	0228	3489	594	2788	15426					
032	5040	0226		586							
032	5225	0230	3490	589	2789	15494					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1780	3591		2604	15170	0000	00000	1982
0010	1741 C	3595		2616	15161	0019	00001	1868
0020	1703 E	3597		2627	15151	0038	00004	1764
*0030	1666 G	3599		2637	15142	0055	00008	1670
0050	1623	3605		2652	15133	0087	00021	1543
0075	1516 D	3599		2672	15104	0124	00044	1358
0100	1427	3590		2684	15078	0157	00074	1250
0125	1383 B	3580		2686	15067	0188	00110	1238
0150	1352	3571		2686	15059	0219	00154	1245
0175	1322	3566		2688	15053	0251	00206	1234
0200	1310 B	3564		2689	15053	0282	00266	1229
0225	1310 B	3565		2690	15057	0313	00334	1227

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1296	3565		2692	15057	0343	00409	1213
0300	1232 B	3558		2699	15042	0403	00577	1151
0400	1053 C	3539		2718	14994	0511	00960	0986
0500	0811	3512		2737	14917	0601	01374	0807
0600	0643 B	3500		2752	14867	0676	01792	0667
0700	0553 C	3505		2767	14848	0736	02191	0526
0800	0517	3508		2774	14850	0786	02577	0467
1000	0449	3500		2775	14854	0880	03449	0464
1200	0408	3497		2778	14870	0973	04494	0448
1500	0378	3496		2780	14908	1109	06388	0447
2000	0353	3496		2782	14982	1338	10530	0455
2500	0320	3496		2786	15054	1567	15845	0444
3000	0283	3494		2787	15124	1792	22229	0436
3500	0248	3493		2790	15196	2010	29550	0416
4000	0230	3492		2790	15276	2224	37880	0420
4500	0227	3490		2789	15363	2448	47759	0451
5000	0226	3490		2789	15452	2684	59460	0470

C-REF-NO 009 YR 1964 DEPTH 5140 WAVES 1 2024 AIR T 21.2 VIS 7
 CONS. NO 023 MONTH 6 MXSAMPD 49 WAVES 2 2236 WET B 19.9 STN
 LAT 38-269N DAY 12 NO.DPTH 23 WND-DIR 210 WW-CODE 03
 LON 47-015W HR 10.0 W-COLOR WND-SPD 12 CLD-TPE 6
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1018.0 CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
100	0000	195	3616		2580	15221						
100	0047	1749	3607	523	2623	15171					004	
100	0092	1622	3598	542	2647	15139					004	
100	0138	1586	3611	500	2665	15137					004	
100	0185	1490	3593	496	2673	15113					006	
100	0231	1472	3596	514	2679	15115					005	
100	0278	1389	3578	538	2683	15093					006	
100	0371	1254	3549	490	2688	15060					008	
100	0465	1163	3548	413	2705	15044					013	
100	0559	0938	3519	481	2722	14975					017	
100	0645	0781	3513	447	2742	14930					016	
100	0731	0652	3506	439	2755	14893					017	
100	0828	0574	3506	500	2765	14878					017	
100	0917	0506	3502	534	2771	14864					015	
100	1116	0449	3502	573	2777	14874						
121	1416	0387	3497	617	2780	14898						
121	1906	0360	3496	614	2782	14969						
121	2392	0333	3498	612	2786	15041						
121	2890	0297	3496	601	2788	15111						
121	3380	0261	3494	601	2789	15180						
121	3883	0235	3492	600	2790	15257						
121	4380	0227	3492	592	2791	15342						
121	4880	0227	3490	597	2789	15431						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1950	3616		2580	15221	0000	00000	2210
0010	1899	3612		2590	15208	0022	00001	2115
0020	1852	3609		2599	15196	0043	00004	2028
*0030	1809	3607		2608	15185	0063	00009	1948
0050	1738	3606		2625	15168	0100	00025	1792
0075	1661	3600		2639	15148	0144	00052	1667
0100	1614 B	3601		2650	15138	0185	00089	1569
0125	1594 C	3608		2661	15137	0223	00133	1481
0150	1561 B	3607		2668	15131	0260	00185	1421
0175	1510 B	3597		2672	15118	0295	00244	1389
0200	1483 C	3594		2675	15113	0330	00310	1365
0225	1474 B	3596		2678	15114	0364	00385	1341
0250	1442 B	3590		2681	15107	0397	00467	1323

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1353	3570		2684	15084	0464	00654	1304
0400	1231 C	3549		2693	15057	0592	01114	1242
0500	1084 D	3538		2712	15021	0709	01651	1076
0600	0858	3515		2732	14952	0808	02204	0879
0700	0694	3508		2751	14904	0887	02731	0694
0800	0593	3506		2763	14881	0952	03227	0584
1000	0473 C	3501		2774	14865	1060	04215	0482
1200	0428	3501		2778	14880	1154	05280	0449
1500	0379	3496		2780	14909	1290	07173	0445
2000	0355	3496		2783	14983	1519	11303	0454
2500	0326	3498		2786	15056	1746	16584	0440
3000	0288	3496		2788	15127	1969	22916	0433
3500	0253	3493		2790	15198	2188	30264	0422
4000	0232	3492		2790	15277	2404	38657	0421
4500	0225	3491		2790	15362	2624	48386	0437

C-REF-NO 009 YR 1964 DEPTH 5103 WAVES 1 1923 AIR T 21.5 VIS 8
 CONS. NO 024 MONTH 6 MXSAMPD 53 WAVES 2 1935 WET B 20.5 STN
 LAT 37-300N DAY 12 NO.DPTH 25 WND-DIR 180 WW-CODE 03
 LON 47-257W HR 20.3 W-COLOR WND-SPD 07 CLD-TPE 0
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1022.3 CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
203	0000	208	3650		2571	15260					
203	0049	2037	3652	535	2584	15257				003	
203	0098	1842	3644	571	2629	15210				004	
203	0147	1789	3646	450	2643	15203				003	
203	0196	1778	3650	484	2649	15209				003	
203	0244	1769	3650	493	2651	15214				003	
203	0293	1761	3650	488	2653	15220				004	
203	0391	1737	3647	497	2657	15228				003	
203	0490	1587	3615	454	2668	15196				005	
203	0588	1395	3577	497	2681	15146				006	
203	0685	1200	3551	445	2700	15094				010	
203	0784	1004	3528	338	2718	15038				016	
203	0884		3517	388						016	
203	0983	0691	3512	437	2755	14951				017	
203	1182	0535	3509	531	2773	14921					
222	1587	0431	3504	585	2781	14946					
222	2092	0373	3498	605	2782	15006					
222	2581	0336		600							
222	3095	0294		602							
222	3593	0256	3494	600	2790	15216					
222	4091	0234	3492	596	2790	15294					
222	4593	0229	3491	600	2790	15380					
222	4894	0230	3491	593	2790	15434					
222	5090	0230	3490	592	2789	15469					
222	5286	0228	3490	585	2789	15504					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2080	3650		2571	15260	0000	00000	2293
0010	2062 E	3650		2576	15257	0023	00001	2251
0020	2043 I	3650		2580	15254	0045	00005	2210
*0030	2024 I	3649		2585	15250	0067	00010	2167
0050	2033	3652		2585	15256	0111	00028	2178
0075	1934 F	3648		2608	15233	0163	00061	1968
0100	1838	3644		2630	15210	0210	00103	1770
0125	1801 B	3644		2639	15203	0254	00153	1688
0150	1788	3646		2644	15204	0296	00213	1651
0175	1780	3648		2647	15206	0337	00281	1626
0200	1777	3650		2649	15209	0378	00360	1616
0225	1772	3650		2651	15212	0419	00449	1612

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1768	3650		2652	15215	0459	00548	1612
0300	1762	3650		2654	15221	0541	00777	1611
0400	1727	3645		2658	15227	0703	01360	1603
0500	1569	3611		2669	15191	0860	02086	1518
0600	1371	3573		2683	15140	1007	02914	1396
0700	1169	3547		2703	15085	1139	03790	1213
0800	0974	3526		2722	15029	1253	04662	1035
1000	0673	3512		2757	14947	1427	06238	0686
1200	0527	3509		2773	14921	1549	07608	0522
1500	0439 C	3505		2781	14935	1699	09677	0462
2000	0380	3499		2782	14994	1936	13957	0470
2500	0342	3496		2784	15063	2177	19555	0476
3000	0302	3495		2786	15132	2416	26340	0461
3500	0262	3494		2789	15202	2644	34001	0432
4000	0237	3492		2790	15279	2864	42548	0427
4500	0229	3491		2790	15364	3088	52422	0444
5000	0230	3490		2789	15454	3324	64078	0472

C-REF-NO 009 YR 1964 DEPTH 5110 WAVES 1 1822 AIR T 21.0 VIS 7
 CONS. NO 025 MONTH 6 MXSAMPD 53 WAVES 2 2023 WET B 20.0 STN
 LAT 38-000N DAY 13 NO.DPTH 25 WND-DIR 180 WW-CODE 03
 LON 47-186W HR 03.5 W-COLOR WND-SPD 09 CLD-TPE 8
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1022.2 CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SID	PH
035	0000	201	3613		2561	15237						
035	0050	1945	3633	525	2594	15230					002	
035	0100	1814	3653	491	2643	15204					003	
035	0150	1786	3652	489	2649	15204					002	
035	0200	1771	3651	492	2652	15207					002	
035	0250	1764	3650	500	2653	15214					002	
035	0300	1751	3648	495	2654	15218					003	
035	0400	1698	3640	492	2661	15218					002	
035	0500	1559	3609	490	2670	15188					005	
035	0600	1405	3584	424	2684	15152					006	
035	0700	1175	3549	358	2704	15087					012	
035	0800	0900	3519	343	2729	15001					016	
035	0900	0690	3507	423	2751	14936					016	
035	1000	0560	3501	494	2763	14900					015	
035	1200	0467	3501	562	2774	14895					015	
052	1601	0399	3498	601	2779	14934					014	
052	2096	0369	3498	603	2782	15005					016	
052	2580	0330	3497	604	2785	15072					019	
052	3084	0290	3496	602	2788	15142					024	
052	3574	0249	3494	601	2790	15209					028	
052	4059	0232	3492	595	2790	15287					034	
052	4566	0226	3491	595	2790	15374					038	
052	4868	0228	3492	593	2791	15429					039	
052	5063	0227	3490	588	2789	15463					043	
052	5260	0226	3489	580	2788	15498					045	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2010	3613		2561	15237	0000	00000	2382
0010	1990 C	3619		2571	15234	0024	00001	2295
0020	1971 E	3624		2580	15231	0046	00005	2213
*0030	1952 G	3628		2588	15228	0068	00010	2136
0050	1945	3633		2594	15230	0111	00028	2093
0075	1877 D	3644		2620	15217	0160	00059	1853
0100	1814	3653		2643	15204	0204	00098	1647
0125	1793 B	3654		2648	15202	0245	00145	1599
0150	1786	3652		2649	15204	0286	00202	1605
0175	1777	3652		2651	15205	0326	00270	1597
0200	1771	3651		2652	15207	0366	00347	1594
0225	1767	3651		2652	15210	0406	00435	1598

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1764	3650		2653	15214	0447	00533	1602
0300	1751	3648		2654	15218	0528	00761	1603
0400	1698	3640		2661	15218	0688	01336	1571
0500	1559	3609		2670	15188	0843	02054	1512
0600	1405	3584		2684	15152	0990	02879	1390
0700	1175	3549		2704	15087	1121	03751	1209
0800	0900	3519		2729	15001	1230	04589	0957
1000	0560	3501		2763	14900	1388	06011	0601
1200	0467	3501		2774	14895	1499	07261	0498
1500	0407 B	3499		2779	14921	1646	09288	0464
2000	0373	3498		2782	14991	1883	13566	0468
2500	0337	3497		2785	15061	2119	19054	0460
3000	0297	3496		2788	15130	2349	25581	0441
3500	0254	3494		2790	15199	2568	32947	0417
4000	0233	3492		2790	15277	2783	41299	0421
4500	0226	3491		2790	15363	3005	51065	0440
5000	0227	3491		2790	15453	3238	62577	0465

C-REF-NO 009 YR 1964 DEPTH 4718 WAVES 1 1822 AIR T 21.9 VIS 7
 CONS. NO 026 MONTH 6 MXSAMPD 49 WAVES 2 1633 WET B 20.9 STN
 LAT 38-000N DAY 13 NO.DPTH 24 WND-DIR 180 WW-CODE 03
 LON 48-258W HR 12.6 W-COLOR WND-SPD 09 CLD-TPE 6
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1023.2 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
126	0000	207	3657		2579	15259						
126	0050	2018	3656	515	2592	15253					003	
126	0099	1790	3649	473	2645	15196					004	
126	0149	1756	3648	493	2653	15194					003	
126	0199	1740	3645	501	2655	15198					003	
126	0249	1731	3647	515	2658	15203					002	
126	0299	1728	3647	512	2659	15211					003	
126	0398	1712	3644	501	2661	15222					002	
126	0498	1691	3640	502	2663	15232					002	
126	0597	1562	3608	469	2668	15205					004	
126	0696	1345	3570	483	2686	15147					007	
126	0795	1197	3549	380	2699	15111					010	
126	0896	0961	3525	332	2723	15040					016	
126	0996	0725	3504	396	2744	14965					017	
126	1196	0523	3502	515	2769	14918						
142	1558	0420	3499	586	2778	14936						
142	2054	0377	3497	606	2781	15002						
142	2542	0344	3497	604	2784	15071						
142	3045	0304	3496	606	2787	15141						
142	3543	0263	3494	605	2789	15210						
142	4040	0238	3491	606	2789	15286						
142	4543	0230	3490	607	2789	15372						
142	4743	0230	3491	602	2790	15407						
142	4945	0225	3490	602	2789	15441						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2070	3657		2579	15259	0000	00000	2217
0010	2046 F	3656		2585	15254	0022	00001	2164
0020	2023 I	3656		2591	15249	0044	00004	2113
*0030	2000 I	3655		2596	15245	0065	00010	2063
0050	2018	3656		2592	15253	0107	00027	2110
0075	1901 H	3652		2620	15224	0156	00059	1852
0100	1788	3649		2646	15196	0200	00097	1615
0125	1759 D	3648		2653	15191	0240	00144	1560
0150	1756	3648		2653	15194	0279	00199	1563
0175	1746	3646		2654	15196	0319	00265	1562
0200	1740	3645		2655	15198	0358	00341	1564
0225	1735	3646		2657	15200	0397	00426	1555
0250	1731	3647		2658	15203	0437	00522	1546

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1728	3647		2659	15211	0515	00743	1556
0400	1712	3644		2661	15222	0673	01311	1574
0500	1689	3640		2663	15231	0832	02049	1587
0600	1556	3607		2669	15203	0991	02943	1551
0700	1339	3569		2686	15145	1139	03931	1390
0800	1186	3548		2700	15108	1273	04963	1265
1000	0719	3504		2744	14963	1483	06861	0813
1200	0521	3502		2769	14918	1623	08414	0564
1500	0423 C	3499		2778	14927	1782	10607	0481
2000	0379	3497		2781	14993	2027	15024	0482
2500	0347	3497		2784	15065	2271	20692	0477
3000	0308	3496		2787	15135	2509	27464	0459
3500	0266	3494		2789	15204	2738	35150	0437
4000	0239	3491		2789	15280	2963	43869	0439
4500	0230	3490		2789	15364	3192	53993	0454

C-REF-NO 009	YR 1964	DEPTH 5231	WAVES 1 2321	AIR T 21.0	VIS 7
CONS. NO 027	MONTH 6	MXSAMPD 54	WAVES 2 2323	WET B 20.0	STN
LAT 38-041N	DAY 13	NO.DPTH 26	WND-DIR 230	WW-CODE 13	
LON 49-559W	HR 22.2	W-COLOR	WND-SPD 07	CLD-TPE 6	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1022.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
222	0000	207	3653		2576	15258					
222	0010	2039	3650	520	2582	15251					
231	0050	1978	3650	529	2598	15241				003	
231	0099	1793	3651	480	2646	15197				004	
236	0150	1760	3650	508	2654	15196				003	
236	0200	1758	3650	514	2654	15204				002	
236	0250	1742	3648	524	2657	15207				002	
236	0300	1738	3649	510	2658	15214				003	
*242	0400	1735	3646	525	2657	15229				002	
*242	0500	1723	3645	515	2659	15242				002	
*242	0600	1622	3621	455	2664	15225				004	
*250	0695	1428	3585	388	2680	15176				006	
*250	0790	1236	3556	335	2697	15124				010	
*259	0898	0994	3526	392	2718	15053				016	
*259	0996	0756	3506	420	2741	14977				018	
*267	1194	0531	3500	515	2766	14921				015	
*267	1492	0434	3499	589	2776	14931				014	
*294	1995	0387	3497	610	2780	14996				014	
*294	2430	0359	3497	621	2783	15058				016	
*326	2975	0319	3497	608	2786	15135				021	
*326	3474	0279		601						025	
*326	3973	0245	3493	600	2790	15278				030	
*326	4471	0232	3492	613	2790	15360				035	
*326	4970	0230		599						039	
*326	5170	0229	3490	599	2789	15483				038	
*326	5370	0227		589						042	

*MULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2070	3653		2576	15258	0000	00000	2246
0010	2039	3650		2582	15251	0022	00001	2192
0020	2023 C	3649		2586	15248	0044	00004	2161
0030	2007 D	3649		2589	15246	0066	00010	2127
0050	1978	3650		2598	15241	0108	00027	2052
0075	1882 F	3651		2624	15219	0157	00058	1819
0100	1791	3651		2647	15197	0200	00096	1608
0125	1764 C	3651		2653	15193	0240	00142	1555
0150	1760	3650		2654	15196	0279	00198	1559

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0175	1758	3650		2654	15199	0318	00263	1562
0200	1758	3650		2654	15204	0358	00339	1571
0225	1750	3649		2655	15205	0397	00426	1569
0250	1742	3648		2657	15207	0437	00522	1565
0300	1738	3649		2658	15214	0516	00745	1566
0400	1735	3646		2657	15229	0676	01323	1614
0500	1723	3645		2659	15242	0839	02079	1626
0600	1622	3621		2664	15225	1002	02998	1598
0700	1418	3583		2681	15173	1156	04023	1451
0800	1215	3553		2699	15118	1294	05084	1282
1000	0749	3506		2741	14975	1510	07032	0846
1200	0527	3500		2766	14920	1655	08649	0588
1500	0433	3499		2776	14931	1820	10924	0498
2000	0387	3497		2780	14996	2072	15468	0494
2500	0354	3497		2783	15068	2322	21268	0487
3000	0317	3497		2787	15139	2565	28177	0467
3500	0277	3495		2789	15208	2799	36035	0448
4000	0244	3493		2790	15282	3025	44810	0434
4500	0232	3492		2790	15365	3251	54776	0445
5000	0230	3490		2789	15454	3487	66441	0472

C-REF-NO 009 YR 1964 DEPTH 5227 WAVES 1 2311 AIR T 23.0 VIS 8
 CONS. NO 028 MONTH 6 MXSAMPD 49 WAVES 2 2322 WET B 22.0 STN
 LAT 38-305N DAY 14 NO.DPTH 25 WND-DIR 180 WW-CODE 03
 LON 49-583W HR 13.6 W-COLOR WND-SPD 04 CLD-TPE 3
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1023.1 CLD-AMT 4 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
136	0000	206	3590		2531	15248					002	
136	0049	2021	3655	511	2591	15253					002	
136	0098	1840	3654	507	2637	15211					003	
136	0147	1784	3650	484	2648	15202					002	
136	0196	1760	3648	483	2652	15203					004	
136	0293	1730	3643	495	2656	15210					003	
136	0390	1732	3646	499	2657	15227					004	
136	0485	1704	3640	483	2660	15233					004	
136	0581	1638	3623	468	2662	15227					006	
136	0678	1458	3593	422	2680	15184					009	
136	0770	1306	3569	400	2693	15146					014	
136	0858	1069	3537	339	2714	15075					017	
136	0952	0858	3513	344	2731	15010						
136	1135	0532	3497	500	2763	14911						
136	1426	0444	3500	580	2776	14924						
152	1624	0418	3499	593	2778	14946						
152	1825	0398	3498	602	2779	14972						
152	2020	0382	3497	607	2780	14998						
152	2223	0370	3498	607	2782	15028						
152	2445	0359	3498	600	2783	15061						
152	2665	0344	3497	602	2784	15092						
152	3125	0312	3496	597	2786	15158						
152	3585	0272	3494	605	2788	15221						
152	4065	0243	3493	602	2790	15293						
152	4930	0232	3491	591	2789	15442						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2060	3590		2531	15248	0000	00000	2676
0010	2044 D	3604		2546	15247	0026	00001	2537
0020	2027 H	3616 B		2560	15246	0051	00005	2408
*0030	2010 I	3628 C		2573	15244	0075	00011	2288
0050	2017	3655		2592	15252	0119	00029	2113
0075	1926 F	3659 B		2618	15232	0169	00061	1868
0100	1836	3654		2638	15210	0214	00101	1694
0125	1799 B	3652		2645	15203	0256	00149	1629
0150	1782	3650		2648	15202	0297	00207	1611
0175	1768	3649		2651	15202	0337	00274	1595
0200	1758	3648		2652	15203	0377	00351	1588

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0225	1748	3646		2654	15204	0417	00438	1584
*0250	1740	3645		2655	15206	0457	00536	1583
0300	1730	3643		2656	15211	0537	00762	1589
0400	1731	3646		2658	15228	0698	01341	1605
0500	1699	3638		2659	15234	0861	02093	1619
0600	1606 B	3617		2665	15220	1023	03008	1588
0700	1425 B	3588		2683	15176	1175	04024	1436
0800	1228 C	3558		2700	15123	1312	05075	1272
1000	0757 B	3506		2741	14978	1527	07023	0854
1200	0487 G	3496		2768	14903	1670	08612	0558
1500	0432	3500		2777	14931	1830	10817	0491
2000	0383	3497		2780	14995	2079	15310	0489
2500	0355	3498		2784	15069	2327	21062	0484
3000	0321	3496		2786	15140	2572	28038	0478
3500	0279	3494		2788	15209	2811	36065	0456
4000	0246	3493		2790	15283	3040	44947	0437
4500	0232	3492		2790	15365	3267	54938	0445
5000	0233	3491		2789	15455	3504	66634	0475

C-REF-NO 009 YR 1964 DEPTH 5222 WAVES 1 1821 AIR T 21.0 VIS 8
 CONS. NO 029 MONTH 6 MXSAMPD 53 WAVES 2 2223 WET B 18.5 STN
 LAT 38-595N DAY 14 NO.DPTH 25 WND-DIR 180 WW-CODE 03
 LON 49-556W HR 20.5 W-COLOR WND-SPD 07 CLD-TPE 1
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1022.1 CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
205	0000	228	3653		2517	15312						
205	0048	2000	3644	564	2588	15246					004	
205	0097	1846	3653	548	2635	15212					006	
205	0145	1801	3654	545	2647	15207					006	
205	0193	1776	3653	497	2652	15208					005	
205	0241	1768	3653	502	2654	15214					003	
205	0290	1762	3652	512	2655	15220					004	
205	0387	1738	3648	505	2657	15228					004	
205	0486	1618	3622	453	2666	15205					005	
205	0581	1400	3580	408	2682	15147					008	
205	0673	1146	3542	337	2704	15072					014	
205	0761	0904	3520	346	2729	14996					017	
205	0854	0676	3500	423	2747	14922					018	
205	0945	0569	3501	486	2762	14895					017	
205	1137	0466	3500	570	2774	14884					015	
222	1771	0385	3497	601	2780	14957					015	
222	2268	0357	3498	599	2784	15030					017	
222	2745	0322	3497	595	2786	15097					019	
222	3211	0292	3495	599	2787	15164					023	
222	3693	0258	3494	592	2790	15234					027	
222	4182	0236	3492	594	2790	15310					034	
222	4656	0231	3490	596	2789	15392					036	
222	4845	0231	3488	601	2787	15426					037	
222	5125	0231	3490	591	2789	15476					037	
222	5324	0230	3490	593	2789	15511					040	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2280	3653		2517	15312	0000	00000	2804
0010	2213	3652		2535	15297	0027	00001	2636
0020	2151	3651		2552	15282	0053	00005	2483
*0030	2094	3650		2567	15269	0077	00011	2344
0050	1991	3644		2590	15244	0122	00030	2127
0075	1900	3648		2617	15223	0173	00062	1880
0100	1841	3653		2636	15212	0218	00102	1711
0125	1812 B	3654		2644	15207	0260	00151	1643
0150	1798	3654		2647	15207	0301	00209	1619
0175	1783	3653		2651	15207	0342	00276	1597
0200	1774	3653		2652	15209	0382	00353	1588
0225	1770	3653		2654	15211	0422	00440	1585

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1767	3653		2654	15215	0462	00538	1589
0300	1762	3652		2655	15221	0542	00765	1599
0400	1728	3646		2658	15227	0704	01345	1600
0500	1590	3616		2668	15199	0862	02073	1529
0600	1349	3571		2686	15133	1008	02895	1366
0700	1070	3534		2712	15049	1133	03728	1121
0800	0799 B	3510		2737	14962	1233	04493	0858
1000	0529 B	3501		2767	14887	1377	05789	0559
1200	0448 C	3500		2775	14887	1482	06976	0483
1500	0392 G	3498		2780	14914	1624	08945	0451
2000	0371	3497		2782	14990	1858	13173	0469
2500	0340	3498		2785	15062	2095	18673	0462
3000	0306	3496		2787	15134	2329	25333	0457
3500	0271	3494		2789	15206	2559	33065	0443
4000	0242	3493		2790	15281	2784	41782	0433
4500	0231	3491		2789	15365	3011	51789	0450
5000	0231	3489		2788	15454	3251	63680	0485

C-REF-NO 009 YR 1964 DEPTH 5185 WAVES 1 1921 AIR T 21.5 VIS 8
 CONS. NO 030 MONTH 6 MXSAMPD 54 WAVES 2 2222 WET B 20.0 STN
 LAT 39-301N DAY 15 NO.DPTH 24 WND-DIR 190 WW-CODE 60
 LON 49-591W HR 04.4 W-COLOR WND-SPD 07 CLD-TPE X
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1017.2 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
044	0000	190	3548		2541	15199						
044	0050	1630	3556	556	2613	15129					004	
044	0100	1295	3556	510	2685	15030					008	
044	0150	1263	3552	484	2689	15027					009	
044	0200	1216	3544	471	2692	15019					009	
044	0250	1188	3544	449	2697	15017					010	
044	0300	1143	3542	385	2704	15009					012	
044	0401	0975	3525	335	2721	14964					016	
044	0497	0824	3508	360	2732	14921					019	
044	0601	0682	3505	423	2750	14883					017	
044	0698	0557	3498	484	2761	14848					016	
044	0799	0509	3497	530	2766	14845					016	
044	0900	0481	3502	555	2773	14851					015	
044	0999	0450	3500	578	2775	14855					015	
044	1196	0420	3498	603	2777	14875						
060	1476	0391	3498	612	2780	14910						
060	1978	0364	3497	612	2782	14983						
060	2473	0335	3497	609	2785	15055						
060	2970	0297	3495	607	2787	15125						
060	3466	0263	3494	599	2789	15196						
060	3960	0237	3491	602	2789	15272						
060	4456	0229	3490	606	2789	15356						
060	4955	0230	3490	599	2789	15445						
060	5353	0232	3490	617	2789	15518						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1900	3548		2541	15199	0000	00000	2580
0010	1824 F	3550		2561	15180	0025	00001	2388
0020	1753 I	3552		2580	15161	0048	00005	2212
*0030	1687 I	3553		2597	15143	0070	00010	2054
0050	1630	3556		2613	15129	0110	00026	1912
0075	1448 H	3557		2654	15076	0153	00054	1524
0100	1295	3556		2685	15030	0188	00084	1232
0125	1261 G	3555		2691	15023	0218	00119	1185
0150	1263	3552		2689	15027	0248	00162	1214
0175	1239	3548		2690	15023	0279	00213	1207
0200	1216	3544		2692	15019	0309	00271	1197
0225	1202	3544		2694	15018	0339	00337	1180
0250	1188	3544		2697	15017	0368	00408	1158

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1143	3542		2704	15009	0425	00569	1102
0400	0977	3525		2721	14964	0529	00939	0958
0500	0820	3508		2733	14920	0621	01359	0852
0600	0683	3505		2750	14883	0698	01795	0687
0700	0556	3498		2761	14848	0762	02220	0579
0800	0509	3497		2766	14845	0819	02654	0536
1000	0450	3500		2775	14855	0920	03582	0462
1200	0419	3498		2777	14875	1013	04637	0458
1500	0389	3498		2780	14913	1151	06551	0447
2000	0363	3497		2782	14987	1381	10723	0461
2500	0333	3497		2785	15059	1615	16150	0457
3000	0295	3495		2787	15129	1846	22704	0447
3500	0261	3494		2789	15202	2070	30247	0431
4000	0236	3491		2789	15278	2292	38879	0435
4500	0229	3490		2789	15364	2520	48940	0452
5000	0229	3490		2789	15453	2759	60718	0474

C-REF-NO 009	YR 1964	DEPTH 5053	WAVES 1 1922	AIR T 22.5	VIS 7
CONS. NO 031	MONTH 6	MXSAMPD 52	WAVES 2 2323	WET B 20.5	STN
LAT 39-495N	DAY 15	NO.DPTH 25	WND-DIR 190	WW-CODE 03	
LON 49-578W	HR 11.2	W-COLOR	WND-SPD 12	CLD-TPE 3	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1015.1	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
112	0000	214	3622		2533	15273					
112	0047	1671	3562	551	2608	15142				003	
112	0093	1776	3646	505	2647	15191				003	
112	0141	1700	3637	438	2658	15175				005	
112	0188	1633	3623	453	2663	15161				005	
112	0234	1500	3594	464	2671	15124				005	
112	0281	1403	3576	444	2679	15098				007	
112	0373	1228	3553	406	2696	15052				010	
112	0465	1099	3539	342	2710	15021				014	
112	0555	0709	3485	476	2731	14883				014	
112	0642	0614	3488	457	2746	14861				016	
112	0725	0547	3493	496	2758	14848				016	
112	0814	0573	3507	500	2766	14875				015	
112	0900	0490	3502	556	2772	14855				014	
128	1175	0431	3499	589	2777	14876				014	
128	1450	0392	3497	609	2779	14906				014	
128	1923	0362	3499	603	2784	14973				016	
128	2414	0332	3497	603	2785	15044				019	
128	2965	0288	3495	604	2788	15120				024	
128	3465	0247	3493	598	2790	15189				028	
128	3962	0230	3492	596	2790	15269				034	
128	4462	0225	3490	599	2789	15355				036	
128	4766	0227	3489	595	2788	15410				038	
128	4960	0228	3492	595	2791	15446				038	
128	5160	0229	3491	609	2790	15482				030	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2140	3622		2533	15273	0000	00000	2652
0010	2050 I	3616 D		2553	15250	0026	00001	2470
0020	1969 I	3610 G		2570	15229	0050	00005	2308
*0030	1897 I	3606 I		2586	15210	0072	00011	2164
0050	1672 D	3567 B		2611	15143	0113	00027	1928
0075	1712 I	3610 E		2635	15165	0159	00056	1711
0100	1771 B	3648		2649	15191	0201	00093	1581
0125	1735 D	3646 B		2656	15184	0240	00138	1523
0150	1690	3635		2659	15173	0278	00192	1503
0175	1655 B	3628		2662	15166	0316	00255	1485
0200	1600 B	3616		2665	15152	0353	00326	1459
0225	1527 B	3600		2670	15132	0389	00406	1423

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1464	3587		2674	15114	0425	00492	1391
0300	1364	3570		2682	15088	0493	00685	1321
0400	1202 F	3551		2700	15047	0619	01133	1174
0500	0945 I	3517 B		2720	14968	0728	01633	0987
0600	0641 E	3483		2739	14864	0818	02135	0790
0700	0561	3491		2755	14849	0890	02614	0637
0800	0569 C	3505		2765	14871	0950	03077	0557
1000	0449 F	3500		2775	14855	1053	04024	0463
1200	0427	3499		2777	14879	1147	05085	0462
1500	0388	3497		2780	14912	1286	07014	0451
2000	0358	3499		2784	14985	1512	11094	0440
2500	0326	3497		2786	15056	1738	16351	0448
3000	0285	3495		2788	15125	1963	22728	0432
3500	0245	3493		2790	15195	2179	29982	0412
4000	0229	3492		2790	15276	2392	38248	0417
4500	0225	3490		2789	15362	2614	48063	0447
5000	0228	3491		2790	15453	2849	59678	0466

C-REF-NO 009	YR 1964	DEPTH 3771	WAVES 1 1923	AIR T 21.0	VIS 7
CONS. NO 032	MONTH 6	MXSAMPD 38	WAVES 2 2324	WET B 20.5	STN
LAT 40-180N	DAY 15	NO.DPTH 22	WND-DIR 190	WW-CODE 03	
LON 50-033W	HR 17.5	W-COLOR	WND-SPD 18	CLD-TPE 5	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1011.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SID	PH
175	0000	201	3604		2555	15236					
175	0046	1942	3611	534	2578	15226				003	
175	0092	1815	3651	495	2641	15202				004	
175	0140	1782	3653	490	2651	15201				004	
175	0188	1762	3652	495	2655	15203				004	
175	0233	1752	3651	502	2656	15207				003	
175	0281	1719	3642	507	2657	15204				004	
175	0378	1409	3580	446	2680	15117				006	
175	0472	1242	3558	373	2698	15074				010	
175	0573	1031	3535	343	2719	15014				022	
175	0667	0806	3512	364	2738	14943				019	
175	0759	0635	3500	454	2753	14890				017	
175	0862	0448		569						015	
175	0958	0474	3498	557	2771	14858				015	
175	1155	0434	3499	590	2776	14874					
190	1469	0399	3498	607	2779	14912					
190	1957	0359	3497	622	2783	14978					
190	2454	0329	3496	617	2785	15050					
190	2936	0290	3495	624	2788	15116					
190	3448	0243	3494	640	2791	15185					
190	3650	0226	3492	633	2791	15213					
190	3843	0219	3492	622	2791	15243					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2010	3604		2555	15236	0000	00000	2447
0010	1988 C	3608		2564	15232	0024	00001	2364
0020	1967 E	3613 B		2572	15229	0048	00005	2285
*0030	1947 G	3617 C		2581	15225	0070	00011	2209
0050	1930	3615		2584	15224	0114	00029	2190
0075	1860 C	3637 B		2618	15211	0166	00061	1868
0100	1806	3653		2645	15201	0210	00100	1628
0125	1786 B	3655		2651	15200	0250	00147	1577
0150	1777	3653		2652	15201	0290	00203	1577
0175	1766	3652		2654	15202	0329	00269	1564
0200	1760	3652		2655	15204	0369	00344	1560
0225	1754	3651		2656	15207	0408	00430	1560
0250	1746	3649		2656	15208	0447	00526	1567
0300	1666 F	3631 B		2662	15190	0525	00747	1531
0400	1365 C	3573		2684	15105	0670	01260	1330

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	1187	3552		2703	15059	0796	01838	1162
0600	0965 B	3528		2725	14993	0903	02439	0961
0700	0742	3507		2743	14923	0991	03021	0777
0800	0547 D	3498		2763	14861	1059	03544	0578
1000	0470 B	3498		2772	14863	1168	04548	0501
1200	0428	3499		2777	14879	1266	05649	0461
1500	0396	3498		2780	14916	1406	07590	0456
2000	0356	3497		2783	14984	1636	11754	0452
2500	0326	3496		2785	15056	1867	17113	0453
3000	0284	3495		2788	15125	2093	23509	0430
3500	0238	3493		2791	15192	2304	30607	0397

C-REF-NO 009	YR 1964	DEPTH 3548	WAVES 1 1923	AIR T 20.8	VIS 7
CONS. NO 033	MONTH 6	MXSAMPD 36	WAVES 2 2324	WET B 19.0	STN
LAT 40-321N	DAY 15	NO.DPTH 22	WND-DIR 210	WW-CODE 03	
LON 50-493W	HR 22.2	W-COLOR	WND-SPD 14	CLD-TPE 8	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1012.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	P04 -P-	NO2 NO3	SIO	PH
222	0000	200	3611		2563	15234				
222	0050	1828	3632	483	2623	15197			004	
222	0099	1753	3639	465	2647	15184			004	
222	0149	1754	3649	493	2654	15194			004	
222	0199	1752	3651	499	2656	15202			004	
222	0248	1720	3643	483	2658	15199			004	
222	0298	1570	3609	455	2667	15158			005	
222	0398	1365	3571	463	2683	15104			007	
222	0497	1136	3543	359	2706	15040			011	
222	0596	0859	3512	359	2730	14951			017	
222	0696	0575	3484	493	2748	14853			015	
222	0795	0501	3492	534	2763	14841			015	
236	0862	0425	3494	598	2773	14821			014	
222	0895	0452	3498	604	2774	14838			014	
236	1054	0435	3489	594	2768	14856			014	
236	1571	0384	3497	619	2780	14923			014	
236	2044	0358	3497	619	2783	14992			015	
236	2512	0323	3497	625	2786	15057			018	
236	3035	0275	3496	626	2790	15127			020	
236	3232	0254	3494	634	2790	15152			019	
236	3440	0234	3494	637	2792	15179			021	
236	3634	0218	3493	631	2792	15206			024	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2000	3611		2563	15234	0000	00000	2371
0010	1959	3615		2576	15225	0023	00001	2243
0020	1922	3619		2589	15217	0045	00005	2126
*0030	1888	3623		2601	15210	0066	00010	2021
0050	1828	3632		2623	15197	0105	00025	1815
0075	1779	3636		2638	15188	0149	00053	1678
0100	1753	3639		2647	15184	0190	00090	1602
0125	1749 B	3645		2652	15188	0230	00136	1563
0150	1754	3649		2654	15194	0269	00192	1551
0175	1755	3651		2656	15199	0308	00257	1547
0200	1752	3651		2656	15202	0347	00332	1550
0225	1744 B	3649		2657	15203	0386	00417	1554
0250	1715	3642		2658	15198	0425	00513	1547
0300	1565	3608		2667	15157	0501	00727	1471
0400	1361	3570		2683	15103	0643	01234	1341

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	1128	3542		2707	15037	0768	01803	1123
0600	0846	3511		2731	14947	0869	02372	0892
0700	0570	3484		2749	14852	0950	02905	0701
0800	0493	3492		2764	14838	1013	03390	0553
1000	0454 E	3494		2770	14856	1121	04381	0509
1200	0419	3489 B		2770	14874	1225	05569	0525
1500	0390	3495		2777	14913	1377	07671	0474
2000	0360	3497		2783	14985	1614	11923	0456
2500	0324	3497		2786	15056	1842	17233	0443
3000	0279	3496		2790	15122	2061	23429	0414
3500	0229	3493		2792	15188	2265	30270	0384

C-REF-NO 009	YR 1964	DEPTH 3552	WAVES 1 2123	AIR T 21.0	VIS 7
CONS. NO 034	MONTH 6	MXSAMPD 35	WAVES 2 2325	WET B 20.0	STN
LAT 40-555N	DAY 16	NO.DPTH 22	WND-DIR 220	WW-CODE 02	
LON 49-542W	HR 03.6	W-COLOR	WND-SPD 14	CLD-TPE X	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1011.3	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
036	0000	185	3582		2579	15189						
036	0045	1674	3585	526	2625	15145					003	
036	0091	1720	3639	480	2655	15173					004	
036	0138	1418	3569	492	2670	15079					005	
036	0184	1421	3580	510	2678	15089					005	
036	0230	1265	3547	494	2684	15041					007	
036	0278	1225	3543	519	2689	15034					006	
036	0369	1144	3546	345	2707	15022					013	
036	0466	0911	3520	331	2728	14950						
036	0556	0698	3499	409	2743	14881					018	
036	0641	0416	3473	574	2758	14777					013	
036	0735	0450	3488	574	2766	14809					014	
036	0829	0433	3489	595	2768	14818					013	
036	0918	0473	3502	564	2774	14851					014	
036	1118	0425	3499	596	2777	14864						
054	1539	0374	3499	623	2783	14913						
054	2025	0350	3498	617	2784	14985						
054	2490	0320	3496	612	2786	15052						
054	2955	0278	3494	625	2788	15114						
054	3143	0261	3493	606	2789	15139						
054	3320	0239	3493	613	2790	15161						
054	3518	0220	3491		2790	15187						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1850	3582		2579	15189	0000	00000	2213
0010	1836 I	3592 C		2590	15188	0022	00001	2112
0020	1820 I	3600 E		2601	15186	0043	00004	2016
*0030	1801 I	3607 G		2610	15183	0062	00009	1927
0050	1682 E	3593 B		2629	15149	0100	00024	1761
0075	1710 I	3624 C		2646	15166	0142	00051	1605
0100	1664 I	3627 C		2659	15156	0181	00086	1485
0125	1504 I	3591 D		2668	15107	0217	00128	1410
0150	1412 G	3570 B		2672	15079	0252	00178	1375
0175	1415 F	3577 B		2676	15085	0287	00235	1343
0200	1369 E	3569 B		2681	15073	0320	00299	1309
0225	1283 B	3551		2684	15046	0353	00370	1280
0250	1241 C	3543		2686	15035	0385	00448	1263
0300	1212 B	3544		2693	15034	0447	00624	1213

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1078 C	3539		2714	15002	0560	01026	1030
0500	0836 B	3512		2734	14927	0655	01459	0844
0600	0538 H	3484		2752	14823	0730	01881	0650
0700	0419 H	3481		2763	14790	0790	02279	0537
0800	0438 B	3489		2768	14815	0843	02686	0509
1000	0464 D	3503		2776	14861	0941	03585	0455
1200	0411	3499		2779	14872	1032	04614	0442
1500	0377	3499		2782	14908	1164	06444	0424
2000	0351	3498		2784	14982	1382	10398	0436
2500	0319	3496		2786	15053	1606	15609	0443
3000	0274	3494		2788	15120	1828	21896	0425
3500	0222	3491		2790	15185	2036	28864	0388

C-REF-NO 009	YR 1964	DEPTH 3103	WAVES 1 2223	AIR T 19.8	VIS 6
CONS. NO 035	MONTH 6	MXSAMPD 31	WAVES 2 2323	WET B 18.8	STN
LAT 41-196N	DAY 16	NO-DPTH 21	WND-DIR 220	WW-CODE 05	
LON 49-502W	HR 09.8	W-COLOR	WND-SPD 09	CLD-TPE 0	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1012.3	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SID	PH
098	0000	161	3526		2594	15111					
098	0046	1470	3568	523	2658	15080				004	
098	0091	1362	3559	517	2674	15052				006	
098	0137	1306	3554	488	2682	15040				007	
098	0182	1259	3553	452	2690	15031				008	
098	0228	1179	3546	409	2700	15011				011	
098	0273	1067	3533	336	2711	14977				014	
098	0367	0622	3473	519	2733	14816				014	
098	0455	0538	3477	511	2747	14798				015	
098	0555	0598	3506	479	2762	14842				016	
098	0654	0431	3488	589	2768	14788				013	
098	0753	0405	3488	628	2771	14793				013	
098	0852	0419	3494	620	2774	14817				012	
112	0939	0433	3500	595	2777	14838				014	
112	1138	0412	3500	612	2779	14862				014	
112	1439	0379	3498	622	2781	14899				014	
112	1936	0348	3496	624	2783	14969				015	
112	2429	0316	3497	624	2787	15040				019	
112	2729	0292		631						018	
112	2929	0272		628						020	
112	3126	0239	3493	632	2790	15127				020	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1610	3526		2594	15111	0000	00000	2070
0010	1575	3535		2609	15103	0020	00001	1931
0020	1542	3543 B		2623	15096	0039	00004	1804
*0030	1511	3550 B		2635	15089	0057	00008	1691
0050	1459	3568		2660	15077	0088	00021	1457
0075	1396	3565		2671	15061	0124	00044	1360
0100	1349	3558		2676	15048	0158	00074	1325
0125	1318	3555		2680	15042	0190	00112	1291
0150	1294	3554		2684	15038	0223	00157	1259
0175	1267	3553		2689	15033	0254	00209	1219
0200	1232	3551		2694	15025	0284	00267	1175
0225	1185	3547		2700	15012	0313	00331	1127
0250	1130	3541		2705	14997	0341	00398	1077
0300	0935 I	3515 B		2719	14931	0392	00542	0945
0400	0564 D	3470		2738	14798	0478	00846	0758
0500	0569 H	3491 B		2754	14819	0547	01164	0618

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0527 H	3500 B		2766	14820	0605	01486	0517
0700	0408 B	3487		2769	14786	0655	01822	0480
0800	0409	3490		2772	14803	0703	02189	0462
1000	0431 B	3501		2778	14847	0793	03022	0429
1200	0405	3500		2780	14870	0880	04005	0427
1500	0374	3498		2782	14907	1010	05820	0430
2000	0344	3496		2783	14979	1232	09824	0441
2500	0311	3496		2786	15050	1455	15003	0435
3000	0260	3494		2789	15114	1669	21070	0404

C-REF-NO 009	YR 1964	DEPTH 3228	WAVES 1 2222	AIR T 19.5	VIS 5
CONS. NO 036	MONTH 6	MXSAMPD 33	WAVES 2 2323	WET B 18.0	STN
LAT 41-418N	DAY 16	NO.DPTH 23	WND-DIR 220	WW-CODE 44	
LON 49-478W	HR 15.1	W-COLOR	WND-SPD 08	CLD-TPE 0	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1012.8	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
151	0000	122	3322		2519	14959					
151	0047	0702	3410	663	2673	14787				005	
151	0091	0762	3454	567	2699	14824				007	
151	0137	0708	3464	539	2714	14811				010	
151	0183	0713	3486	476	2731	14824				014	
151	0229	0690	3489	427	2737	14823				016	
151	0277	0526	3472	503	2744	14763				015	
151	0370	0366	3466	601	2757	14711				013	
151	0462	0448	3490	577	2768	14763				015	
151	0563	0418	3493	612	2773	14768				013	
151	0653	0456	3501	574	2775	14800				014	
151	0749	0410	3495	625	2776	14796				012	
151	0850	0414	3498	617	2778	14815				014	
165	1024	0405	3499	604	2779	14840				014	
165	1221	0392	3498	615	2780	14867					
165	1509	0366	3495	634	2780	14904					
165	1996	0339	3496	624	2784	14976					
165	2240	0326	3496	622	2785	15012					
165	2472	0308	3495	624	2786	15044					
165	2720	0288	3494	632	2787	15078					
165	2956	0271									
165	3146	0251	3494	635	2790	15136					
165	3293	0241	3492	636	2790	15157					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1220	3322		2519	14959	0000	00000	2785
0010	1113 I	3344		2556	14926	0026	00001	2438
0020	1018 I	3364		2588	14896	0049	00005	2132
*0030	0933 I	3382		2617	14869	0069	00010	1864
0050	0699 C	3414		2676	14787	0101	00022	1298
0075	0716 I	3442		2696	14801	0132	00041	1115
0100	0754 B	3457		2702	14822	0159	00066	1061
0125	0725 C	3463		2711	14816	0185	00096	0983
0150	0708 B	3471		2720	14814	0209	00129	0905
0175	0711	3482		2729	14821	0230	00165	0825
0200	0714 B	3489		2734	14827	0251	00204	0782
0225	0695	3490		2736	14824	0270	00247	0759
0250	0624 D	3482		2740	14799	0289	00292	0722
0300	0465	3467		2748	14741	0323	00389	0647

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0385 F	3473		2761	14725	0382	00599	0525
0500	0440 D	3492		2770	14767	0432	00826	0454
0600	0435 C	3497		2774	14782	0476	01077	0425
0700	0436 C	3499		2776	14799	0519	01364	0425
0800	0409	3496		2777	14804	0562	01694	0421
1000	0407	3499		2779	14837	0647	02477	0415
1200	0394	3498		2780	14865	0732	03441	0424
1500	0367	3495		2780	14903	0863	05271	0439
2000	0339	3496		2784	14976	1085	09276	0435
2500	0306	3495		2786	15048	1305	14403	0432
3000	0266	3494		2789	15117	1520	20483	0408

C-REF-NO 009	YR 1964	DEPTH 3585	WAVES 1 2222	AIR T 15.0	VIS 0
CONS. NO 037	MONTH 6	MXSAMPD 36	WAVES 2 2323	WET B 15.0	STN
LAT 41-500N	DAY 16	NO.DPTH 22	WND-DIR 190	WW-CODE 62	
LON 49-575W	HR 19.5	W-COLOR	WND-SPD 10	CLO-TPE X	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1011.5	CLO-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
195	0000	117	3335		2539	14943						
195	0050	0264	3363	792	2685	14600					002	
195	0099	0529	3434	620	2714	14730					008	
195	0149	0486	3444	584	2727	14721					011	
195	0199	0375	3442	622	2737	14683					012	
195	0249	0655	3488	436	2741	14812					017	
195	0299	0468	3474	543	2753	14743					017	
195	0398	0483	3488	553	2762	14767					016	
195	0497	0402	3487	618	2770	14750					014	
195	0597	0438	3495	599	2773	14782					014	
195	0697	0406	3497	631	2778	14786					013	
195	0797	0426	3503	602	2780	14812					015	
208	0896	0423	3500	601	2778	14826					015	
208	0955	0412	3498	605	2778	14831					015	
208	1155	0392									008	
208	1455	0370	3498	625	2782	14897					017	
208	1959	0344	3496	623	2783	14971					017	
208	2450	0308	3495	628	2786	15040					019	
208	2953	0271	3495	634	2789	15111					020	
208	3256	0241	3493	636	2790	15150					022	
208	3449	0229	3492	633	2791	15179					026	
208	3646	0217	3491	632	2791	15208					028	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1170	3335		2539	14943	0000	00000	2600
0010	1003 I	3345 B		2576	14887	0024	00001	2248
0020	0853 I	3354 C		2607	14834	0046	00004	1951
*0030	0721 I	3363 D		2634	14786	0064	00009	1701
0050	0264	3363		2685	14600	0093	00021	1215
0075	0347 I	3400 B		2707	14645	0121	00038	1007
0100	0530	3435		2714	14730	0146	00060	0943
0125	0531 E	3444		2722	14736	0169	00087	0877
0150	0482	3444		2727	14720	0190	00117	0826
0175	0408 I	3441		2733	14693	0210	00150	0772
0200	0381 B	3443		2737	14686	0229	00187	0730
0225	0525 I	3467 B		2740	14753	0248	00226	0713
0250	0653	3488		2741	14811	0266	00270	0718
0300	0467	3474		2753	14742	0299	00364	0599

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0481	3488		2762	14767	0355	00565	0523
0500	0403	3487		2770	14750	0405	00791	0450
0600	0437	3495		2773	14782	0450	01045	0441
0700	0406	3497		2778	14787	0492	01328	0399
0800	0426	3503		2780	14812	0532	01636	0390
1000	0406	3497		2778	14836	0615	02405	0427
1200	0388	3495		2778	14862	0702	03399	0438
1500	0368	3498		2782	14904	0833	05210	0420
2000	0341	3496		2783	14977	1051	09162	0439
2500	0305	3495		2786	15047	1272	14292	0429
3000	0266	3495		2790	15117	1485	20331	0405
3500	0225	3492		2791	15186	1688	27152	0389

C-REF-NO 009	YR 1964	DEPTH 3356	WAVES 1 2222	AIR T 14.0	VIS 0
CONS. NO 038	MONTH 6	MXSAMPD 34	WAVES 2 2323	WET B 14.0	STN
LAT 42-095N	DAY 17	NO.DPTH 23	WND-DIR 190	WW-CODE 45	
LON 49-590W	HR 00.5	W-COLOR	WND-SPD 12	CLD-TPE X	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1010.5	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
005	0000	098									
005	0049	0428	3406	674	2703	14676				007	
005	0098	0430	3436	611	2727	14689				012	
005	0148	0378	3465	607	2755	14679				013	
005	0197	0446	3472	558	2754	14716				018	
005	0246	0350	3464	620	2757	14683				016	
005	0295	0402	3474	595	2760	14714				020	
005	0393	0466	3504	573	2777	14761				015	
005	0492	0430	3497	601	2775	14762				014	
005	0589	0414	3492	622	2773	14771				019	
005	0686	0399	3493	639	2775	14780				013	
005	0781	0387	3494	644	2777	14791				013	
012	0912	0374	3493	652	2778	14808				012	
012	1008	0368	3498	653	2782	14822				013	
012	1205	0357	3493	657	2780	14849					
012	1500	0358	3494	641	2780	14899					
012	1753	0348	3496	638	2783	14938					
030	1995	0341	3494	627	2782	14976					
030	2225	0322	3494	632	2784	15007					
030	2470	0305	3495	628	2786	15042					
030	2960	0262	3492	633	2788	15108					
030	3163	0237	3491	641	2789	15132					
030	3360	0220	3491	643	2790	15159					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0980	3361 D		2592	14879	0000	00000	2088
0010	0868 I							
0020	0766 I							
*0030	0675 I							
0050	0426	3407		2704	14675	0079	00013	1033
0075	0398 I	3425		2722	14670	0103	00028	0870
0100	0427	3437		2728	14688	0124	00047	0810
0125	0398 D	3453		2744	14682	0142	00069	0664
0150	0381	3466		2755	14681	0158	00090	0555
0175	0418 F	3471		2756	14701	0172	00114	0555
0200	0440 B	3472		2754	14715	0186	00141	0578
0225	0392 F	3467		2756	14698	0200	00172	0561
0250	0352	3464		2757	14685	0214	00206	0544
0300	0407	3476		2761	14718	0241	00282	0520

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0465	3504		2777	14762	0287	00443	0384
0500	0428	3496		2775	14762	0327	00629	0410
0600	0412	3492		2773	14772	0370	00871	0435
0700	0397	3493		2776	14782	0413	01159	0418
0800	0385	3494		2777	14794	0455	01482	0410
1000	0368	3498		2782	14821	0534	02220	0380
1200	0357	3493		2780	14849	0615	03136	0415
1500	0358	3494		2780	14900	0744	04943	0435
2000	0341	3494		2782	14977	0970	09024	0452
2500	0303	3495		2786	15046	1194	14214	0428
3000	0257	3492		2788	15113	1408	20303	0413

C-REF-NO 009 YR 1964 DEPTH 2588 WAVES 1 2022 AIR T 13.5 VIS 0
 CONS. NO 039 MONTH 6 MXSAMPD 26 WAVES 2 2222 WET B 13.5 STN
 LAT 42-290N DAY 17 NO.DPTH 21 WND-DIR 190 WW-CODE 45
 LON 49-595W HR 06.9 W-COLOR WND-SPD 14 CLD-TPE X
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1007.8 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
069	0000	087	3321		2579	14833						
069	0046	0456	3414	676	2707	14688						
069	0091	0424	3443	607	2733	14686					007	
069	0139	0283	3443	671	2747	14634					013	
069	0185	0361	3465	635	2757	14678					011	
069	0233	0328	3461	666	2757	14671					014	
069	0281	0310	3467	692	2763	14672					013	
069	0379	0374	3483	661	2770	14718					012	
069	0475	0366	3484	680	2772	14730					012	
069	0577	0378	3482	669	2769	14752					012	
069	0672	0384	3491	656	2775	14772					012	
069	0769	0374	3490	667	2776	14783					012	
069	0869	0368	3491	671	2777	14798					013	
080	1045	0364	3491	668	2777	14825					013	
080	1250	0359	3490	671	2777	14857					012	
080	1543	0354	3491	669	2778	14905					012	
080	1838	0351	3494	644	2781	14954					013	
080	2035	0342	3494	648	2782	14983					015	
080	2232	0329	3494	643	2783	15011					015	
080	2430	0300	3494	639	2786	15033					016	
080	2630	0298	3494	644	2786	15066					017	
											018	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0870	3321		2579	14833	0000	00000	2219
0010	0786 H	3344		2609	14805	0021	00001	1930
0020	0708 I	3365		2636	14779	0039	00004	1672
*0030	0636 I	3383 B		2661	14755	0055	00008	1445
0050	0448 C	3418		2711	14686	0079	00017	0968
0075	0420 I	3438		2729	14681	0101	00031	0796
0100	0393 D	3443		2736	14675	0121	00048	0730
0125	0318 F	3443		2744	14647	0138	00068	0660
0150	0297 E	3448		2750	14642	0154	00091	0605
0175	0340 E	3460		2755	14667	0169	00115	0557
0200	0356 C	3465		2757	14678	0182	00142	0542
0225	0337 B	3462		2757	14674	0196	00172	0544
0250	0319	3463		2759	14670	0210	00205	0527
0300	0320 C	3471		2765	14680	0235	00276	0471
0400	0374 B	3484		2771	14722	0281	00439	0434
0500	0368	3483		2771	14735	0325	00644	0443

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0380	3484		2770	14757	0370	00902	0457
0700	0382	3491		2776	14775	0414	01196	0416
0800	0372	3490		2776	14788	0457	01523	0420
1000	0365	3491		2777	14818	0542	02314	0423
1200	0360	3490		2777	14850	0630	03307	0441
1500	0355	3491		2778	14898	0766	05208	0455
2000	0344	3494		2782	14978	0997	09389	0456
2500	0303 B	3494		2786	15047	1224	14647	0435

C-REF-NO 009	YR 1964	DEPTH 146	WAVES 1 2021	AIR T 11.3	VIS 0
CONS. NO 040	MONTH 6	MXSAMPD 01	WAVES 2 2223	WET B 11.3	STN
LAT 42-500N	DAY 17	NO.DPTH 7	WND-DIR 180	WW-CODE 45	
LON 50-000W	HR 11.4	W-COLOR	WND-SPD 13	CLD-TPE X	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1006.5	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	STD	PH
114	0000	008	3278		2630	14499					
114	0010	0378	3302	832	2626	14634				003	
118	0030	0021	3342	869	2684	14486				002	
114	0048	-0075	3343	752	2689	14444					
114	0073	-0074	3352	747	2697	14450				006	
114	0097	-0041	3404	734	2737	14477				009	
114	0145	0042		717						012	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0080	3278		2630	14499	0000	00000	1734
0010	0378	3302		2626	14634	0018	00001	1772
0020	0262 I	3325		2655	14589	0034	00003	1498
0030	0021	3342		2684	14486	0048	00007	1215
0050	-0078	3343		2689	14443	0072	00017	1166
0075	-0072	3361 B		2703	14453	0099	00034	1031
0100	-0044 B							
0125	-0003 B							

C-REF-NO 009	YR 1964	DEPTH 45	WAVES 1 1921	AIR T 09.5	VIS 0
CONS. NO 041	MONTH 6	MXSAMPD 00	WAVES 2 2223	WET B 09.5	STN
LAT 43-100N	DAY 17	NO.DPTH 4	WND-DIR 180	WW-CODE 45	
LON 50-000W	HR 13.8	W-COLOR	WND-SPD 12	CLD-TPE X	
MARSD SQ 150	C/I 1810	W-TRNSP	BARO 1007.4	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
138	0000	088	3307		2566	14835					
138	0010	0742	3306	741	2586	14783					
138	0030	0259	3309	903	2642	14587					
138	0050	0066	3319	820	2663	14506					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0880	3307		2566	14835	0000	00000	2338
0010	0742	3306		2586	14783	0023	00001	2154
0020	0500 I	3307		2617	14687	0043	00004	1859
0030	0259	3309		2642	14587	0060	00009	1619
0050	0066	3319		2663	14506	0091	00021	1414

C-REF-NO 009 YR 1964 DEPTH 2780 WAVES 1 1821 AIR T 08.5 VIS 0
 CONS. NO 042 MONTH 6 MXSAMPD 25 WAVES 2 2021 WET B 08.5 STN
 LAT 44-356N DAY 21 NO.DPTH 19 WND-DIR 180 WW-CODE 45
 LON 48-352W HR 07.3 W-COLOR WND-SPD 06 CLD-TPE X
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1023.1 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
073	0000	088	32895		2552	14832						
085	0010	0933	33498	690	2591	14862						
085	0049	0575	34184	701	2696	14738					009	
085	0098	0518		550							015	
085	0147	0443	34576	580	2742	14705					015	
085	0196	0598	34965	467	2755	14782					019	
085	0243	0548	34965	504	2761	14769					018	
085	0292	0555	35024	525	2765	14781					017	
085	0395	0452	34976	588	2773	14755					014	
085	0485	0476	35012	573	2773	14780					015	
085	0585	0423	34976	619	2776	14774					016	
085	0675	0407	34944	632	2776	14782					015	
085	0773	0398	34949	639	2777	14795					014	
101	0882	0386	34948	645	2778	14808					015	
101	0976	0372	34953	654	2780	14818					014	
101	1170	0359	34924	650	2779	14844					014	
085	1444	0354	34916	656	2779	14888					014	
101	1955	0341	34945	637	2782	14969						
101	2460	0310	34932	650	2784	15042					017	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0880	32895		2552	14832	0000	00000	2468
0010	0933	33498		2591	14862	0023	00001	2102
0020	0871 I	3382 I		2626	14844	0043	00004	1775
0030	0788 I	3403 I		2655	14817	0059	00008	1495
0050	0572	3419 B		2697	14737	0085	00018	1101
0075	0519 I	3436 I		2716	14722	0111	00035	0919
0100	0513	3448 I		2727	14725	0133	00054	0827
0125	0464 E	3455 I		2738	14710	0152	00076	0720
0150	0452 B	3460 B		2744	14710	0170	00101	0669
0175	0530 I	3482 G		2751	14749	0186	00128	0602
0200	0596 B	3497 B		2756	14782	0200	00156	0569
0225	0575 E	3498 F		2759	14778	0214	00187	0537
0250	0548	34973		2762	14771	0228	00219	0515
0300	0547 B	3502 B		2766	14779	0253	00290	0484
0400	0453	34978		2773	14756	0298	00452	0417
0500	0470 B	35009		2774	14780	0341	00649	0424
0600	0419	34969		2776	14775	0383	00886	0406

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0404	34944		2776	14785	0424	01164	0418
0800	0395	34949		2777	14798	0466	01489	0413
1000	0370	34950		2780	14821	0549	02250	0400
1200	0358	34922		2779	14849	0632	03199	0424
1500	0353	34919		2779	14897	0764	05043	0445
2000	0337	3493 C		2782	14975	0993	09171	0454
2500	0307	34932		2785	15048	1222	14491	0446

C-REF-NO 009	YR 1964	DEPTH 5177	WAVES 1 2521	AIR T 22.2	VIS 8
CONS. NO 043	MONTH 6	MXSAMPD 10	WAVES 2 00X0	WET B 17.5	STN
LAT 38-542N	DAY 22	NO.DPTH 13	WND-DIR 240	WW-CODE 02	
LON 48-050W	HR 14.8	W-COLOR	WND-SPD 07	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1022.7	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
148	0000	219	36506		2541	15289						
148	0049	2050	36538	523	2582	15261						
148	0098	1808	36515	518	2643	15201						
148	0148	1772	36527	499	2653	15199						
148	0197	1763	36519	510	2654	15205						
148	0247	1746	36489	507	2656	15208						
148	0296	1739	36491	505	2658	15214						
148	0395	1738	36502	516	2659	15230						
148	0494	1726	36462	515	2659	15242						
148	0593	1623	36222	452	2665	15225						
148	0693	1400	35823	418	2684	15166						
148	0892	0929	35275	332	2731	15028						
148	0992	0679	35050	429	2751	14947						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2190	36506		2541	15289	0000	00000	2578
0010	2147 E	36510		2553	15280	0025	00001	2464
0020	2106 I	3651 B		2565	15271	0050	00005	2357
*0030	2067 I	3652 C		2576	15262	0073	00011	2257
0050	2045	36538		2583	15260	0118	00029	2194
0075	1915 F	36527		2617	15228	0169	00062	1885
0100	1804	36515		2644	15201	0213	00101	1634
0125	1774 D	36521		2652	15196	0254	00147	1567
0150	1771	36527		2653	15200	0293	00203	1566
0175	1766	36525		2654	15202	0332	00269	1563
0200	1762	36517		2654	15205	0372	00345	1568
0225	1753	36502		2655	15206	0411	00431	1568
0250	1745	36489		2656	15208	0451	00527	1567
0300	1739	36492		2658	15214	0530	00750	1566
0400	1739	36503		2659	15231	0689	01324	1591
0500	1723	36452		2659	15242	0851	02074	1624
0600	1609	36195		2666	15221	1013	02988	1580
0700	1384	35800		2686	15162	1164	03990	1404
0800	1151	3550 C		2709	15096	1294	04991	1181
1000	0659	35036		2752	14940	1487	06727	0723

C-REF-NO 009 YR 1964 DEPTH 5093 WAVES 1 0222 AIR T 20.0 VIS 8
 CONS. NO 044 MONTH 6 MXSAMPD 05 WAVES 2 3423 WET B 17.0 STN
 LAT 37-521N DAY 23 NO.DPTH 9 WND-DIR 020 WW-CODE 01
 LON 46-070W HR 22.8 W-COLOR WND-SPD 07 CLD-TPE 6
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1023.1 CLD-AMT 5 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
228	0000	205	35848		2529	15245					
228	0049	1566	35980		2660	15115					
228	0098	1513	36013		2674	15107					
228	0147	1460	35907		2678	15096					
228	0197	1366	35795		2689	15073					
228	0246	1303									
228	0295	1244	35580		2697	15045					
228	0394	1055	35364		2716	14993					
228	0494	0849	35121		2731	14931					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2050	35848		2529	15245	0000	00000	2688
0010	1948 G	35886		2559	15219	0026	00001	2408
0020	1856 I	35919		2585	15195	0049	00005	2162
*0030	1772 I	35947		2608	15173	0069	00010	1947
0050	1563	35982		2661	15114	0104	00024	1457
0075	1511 I	36012		2674	15102	0139	00046	1332
0100	1511	36010		2674	15106	0172	00076	1342
0125	1486	3596 B		2676	15102	0206	00115	1331
0150	1455	35900		2678	15095	0239	00162	1318
0175	1408 B	35844		2684	15084	0272	00216	1270
0200	1362	35788		2689	15072	0303	00277	1225
0225	1328	35733		2692	15064	0334	00344	1205
0250	1299	35678		2694	15058	0364	00417	1194
0300	1236	35569		2698	15043	0424	00585	1166
0400	1055 D	35346		2714	14994	0534	00979	1023
0500	0834	35106		2732	14926	0629	01413	0854

C-REF-NO 009	YR 1964	DEPTH 5057	WAVES 1 0522	AIR T 21.0	VIS 8
CONS. NO 045	MONTH 6	MXSAMPD 10	WAVES 2 3122	WET B 18.0	STN
LAT 37-261N	DAY 24	NO.DPTH 14	WND-DIR 050	WW-CODE 03	
LON 45-218W	HR 03.7	W-COLOR	WND-SPD 07	CLD-TPE 0	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1024.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
037	0000	220	36340		2525	15290						
037	0047	1946	36361		2596	15230						
037	0094	1787	36468		2645	15194						
037	0140	1780	36508		2649	15200						
037	0188	1763	36513		2654	15203						
037	0236	1754	36505		2655	15208						
037	0283	1734	36474		2658	15210						
037	0378	1666	36321		2663	15203						
037	0476	1465	35931		2678	15152						
037	0570	1245	35546		2694	15091						
037	0665	1076	35407		2715	15046						
037	0765	0873	35220		2735	14986						
037	0859	0723	35150		2752	14943						
037	0960	0616	35136		2766	14918						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2200	36340		2525	15290	0000	00000	2725
0010	2134	3635 B		2545	15274	0027	00001	2546
0020	2073 B	3636 C		2562	15260	0051	00005	2384
*0030	2017 C	3637 D		2578	15247	0075	00011	2239
0050	1932	36368		2600	15227	0118	00028	2034
0075	1836	3642 B		2629	15205	0165	00059	1769
0100	1782 B	36476		2646	15194	0208	00097	1611
0125	1775 C	36500		2650	15196	0248	00143	1584
0150	1777	36511		2650	15201	0288	00199	1589
0175	1768	36514		2653	15202	0328	00266	1575
0200	1761	36513		2654	15205	0368	00342	1569
0225	1756	36508		2655	15207	0407	00428	1569
0250	1749	36499		2656	15209	0447	00525	1568
0300	1728	36459		2658	15211	0526	00748	1564
0400	1628 B	3624 B		2666	15195	0681	01306	1523
0500	1408 B	3582 C		2682	15137	0828	01980	1380
0600	1190 B	3549 D		2701	15076	0959	02716	1213
0700	1004 B	3534 B		2723	15025	1071	03460	1007
0800	0812	35185		2742	14968	1163	04166	0817

C-REF-NO 009	YR 1964	DEPTH 4292	WAVES 1 1021	AIR T 23.9	VIS 8
CONS. NO 046	MONTH 6	MXSAMPD 44	WAVES 2 00X0	WET B 21.2	STN
LAT 35-077N	DAY 28	NO.DPTH 24	WND-DIR 120	WW-CODE 01	
LON 42-432W	HR 11.4	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1028.1	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
114	0000	234	36470		2495	15326					
114	0048	1690	36311	526	2656	15156				003	
114	0097	1560	36141	501	2673	15123				006	
114	0145	1494	36019	491	2679	15108				006	
114	0194	1427	35894	494	2684	15093				008	
114	0243	1359	35769	488	2688	15078				007	
114	0292	1299	35667	476	2693	15065				008	
114	0389	1180	35514	384	2704	15038				012	
114	0487	0985	35288	361	2722	14982				016	
114	0585	0810	35172	389	2741	14932				017	
114	0683	0686	35107	448	2754	14899				019	
114	0781	0646	35161	483	2764	14900				017	
114	0879	0585	35117	520	2769	14891				017	
114	0977	0530	35161	549	2779	14886				017	
114	1176	0448	35038	595	2779	14884				015	
134	1359	0411	35008	615	2780	14899				016	
134	1849	0358	34976	624	2783	14959				017	
134	2341	0319	34967	623	2786	15026				022	
134	2841	0279	34943	612	2788	15095				031	
134	3329	0242	34920	610	2789	15163				035	
134	3813	0231	34909	615	2789	15243				036	
134	4012	0233	34907	614	2789	15279				036	
134	4210	0234	34908	619	2789	15314				035	
134	4402	0236	34908	602	2789	15349				035	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2340	36470		2495	15326	0000	00000	3014
0010	2197 H	36434		2533	15292	0028	00001	2653
0020	2067 I	36398		2567	15259	0054	00005	2340
*0030	1949 I	3636 B		2595	15228	0076	00011	2070
0050	1679 B	36304		2658	15153	0112	00025	1480
0075	1581 I	36215		2674	15126	0147	00047	1335
0100	1555	36133		2674	15121	0181	00078	1346
0125	1518	36067		2677	15113	0214	00116	1322
0150	1487	36006		2679	15107	0248	00163	1309
0175	1453	35942		2682	15099	0280	00218	1292
0200	1418	35878		2684	15091	0313	00280	1275
0225	1384	35814		2687	15083	0345	00350	1258
0250	1350	35753		2689	15076	0376	00427	1241

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1291	35654		2694	15063	0438	00601 .	1209
0400	1159	35488		2706	15032	0555	01019	1108
0500	0960	35268		2725	14975	0658	01492	0939
0600	0787	35157		2744	14925	0744	01973	0762
0700	0677 B	3512 B		2756	14898	0815	02446	0645
0800	0635	3515 B		2765	14899	0877	02919	0573
1000	0518	3515 B		2779	14885	0979	03855	0440
1200	0442	35032		2779	14885	1069	04876	0449
1500	0392	34994		2781	14914	1204	06754	0439
2000	0345	34973		2784	14979	1427	10759	0434
2500	0306	34960		2787	15048	1645	15834	0424
3000	0265	34935		2789	15116	1859	21903	0413
3500	0235	34915		2790	15190	2069	28952	0407
4000	0233	34907		2789	15277	2283	37318	0431

C-REF-NO 009	YR 1964	DEPTH 3979	WAVES 1 1021	AIR T 24.0	VIS 8
CONS. NO 047	MONTH 6	MXSAMPD 40	WAVES 2 1221	WET B 21.0	STN
LAT 35-230N	DAY 28	NO.DPTH 23	WND-DIR 120	WW-CODE 03	
LON 42-470W	HR 16.8	W-COLOR	WND-SPD 07	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1027.6	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2 NO3	SID	PH
168	0000	238	36513		2487	15337				
168	0049	1780	36464	542	2646	15185			005	
168	0098	1614	36219	506	2667	15140			005	
168	0147	1532	36086	502	2675	15121			007	
168	0195	1463	35962	494	2681	15106			006	
168	0244	1409	35857	495	2685	15095			008	
168	0293	1356	35757	494	2688	15085			007	
168	0389	1228	35573	417	2700	15055			010	
168	0490	1040	35345	360	2717	15003			014	
168	0587	0877	35196	374	2733	14958			016	
168	0684	0755	35142	424	2747	14926			016	
168	0784	0645	35132	478	2762	14900			015	
168	0880	0588	35152	516	2771	14893			016	
168	0980	0515	35132	555	2778	14880			014	
168	1177	0452	35035	594	2778	14886				
187	1564	0384	34982	617	2781	14922				
187	2025	0352	34969	607	2783	14986				
187	2490	0310	34969	613	2787	15048				
187	2960	0274	34952	610	2789	15113				
187	3448	0241	34933	605	2791	15184				
187	3645	0235	34923	605	2790	15216				
187	3840	0233	34911	609	2789	15249			035	
187	4035	0233	34907	610	2789	15283			036	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2380	36513		2487	15337	0000	00000	3095
0010	2248 F	3650 C		2524	15306	0029	00001	2747
0020	2128 I	3648 F		2556	15276	0055	00005	2441
*0030	2018 I	3646 H		2584	15248	0079	00011	2176
0050	1774	36459		2647	15183	0117	00026	1586
0075	1660 G	3634 D		2665	15152	0154	00050	1419
0100	1610	36212		2667	15139	0190	00082	1408
0125	1563 B	3614 B		2673	15128	0225	00122	1367
0150	1527	36078		2676	15120	0259	00171	1342
0175	1490	36012		2679	15112	0293	00226	1319
0200	1457	35951		2682	15105	0326	00290	1302
0225	1429	35896		2684	15099	0358	00361	1290
0250	1403	35845		2685	15094	0391	00440	1281
0300	1348	35744		2689	15083	0455	00621	1258

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1208	35547		2702	15050	0577	01056	1156
0500	1022	35326		2719	14998	0686	01556	1002
0600	0859	35185		2735	14953	0779	02083	0855
0700	0735	35138		2750	14921	0859	02609	0715
0800	0634	35136		2764	14898	0924	03113	0585
1000	0506	35123		2779	14880	1029	04063	0444
1200	0446	35029		2778	14887	1120	05098	0457
1500	0391	34983		2780	14914	1257	07010	0447
2000	0353	34969		2783	14982	1485	11117	0448
2500	0309	34969		2787	15049	1707	16252	0422
3000	0271	34951		2789	15119	1919	22282	0410
3500	0239	34931		2791	15192	2126	29256	0401
4000	0233	34908		2789	15277	2340	37566	0431

C-REF-NO 009 YR 1964 DEPTH 3722 WAVES 1 1021 AIR T 23.1 VIS 8
 CONS. NO 048 MONTH 6 MXSAMPD 36 WAVES 2 00X0 WET B 20.0 STN
 LAT 35-420N DAY 28 NO.DPTH 22 WND-DIR 130 WW-CODE 03
 LON 42-538W HR 22.4 W-COLOR WND-SPD 05 CLD-TPE 8
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1028.0 CLD-AMT 4 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PQ4	-P-	NO2	NO3	SIO	PH
224	0000	238	36530		2488	15337						
224	0047	1903	36472	558	2616	15220					003	
224	0093	1719	36394	502	2656	15173					004	
224	0140	1699	36442	502	2664	15176					004	
224	0187	1659	36350	500	2666	15170					005	
224	0233	1610	36236	493	2669	15162					004	
224	0281	1537	36128	491	2678	15146					004	
224	0376	1442	35937	497	2684	15129					005	
224	0471	1351	35826	485	2695	15113					006	
224	0560	1198	35590	404	2707	15073					010	
224	0646	1016	35339	361	2721	15020					014	
224	0737	0864	35229	377	2737	14978					016	
224	0824	0737	35129	415	2749	14942					016	
224	0911	0654	35196	522	2766	14925					016	
224	1098	0564	35170	528	2775	14920					020	
237	1683	0404		594							016	
237	2125	0351		604							018	
237	2624	0309		610							016	
237	3064	0267		602							029	
237	3210	0247	34937	604	2790	15145					032	
237	3405	0239	34918	609	2790	15175					034	
237	3597	0234	34916	609	2790	15207					034	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2380	36530		2488	15337	0000	00000	3082
0010	2263 B	3651 B		2520	15309	0029	00001	2779
0020	2157 D	3649 C		2549	15284	0056	00005	2511
*0030	2062 E	3647 D		2574	15260	0080	00012	2278
0050	1884	36465		2620	15215	0122	00028	1845
0075	1765 B	3642 B		2646	15184	0165	00056	1603
0100	1711 B	3640 B		2658	15172	0204	00091	1500
0125	1697 D	3643 C		2663	15172	0241	00133	1457
0150	1692	36429		2665	15175	0278	00185	1452
0175	1671	36381		2666	15172	0315	00246	1447
0200	1647	36318		2667	15168	0351	00316	1446
0225	1620	36256		2669	15163	0387	00396	1439
0250	1584	36197		2672	15156	0423	00483	1412
0300	1515	36085		2679	15141	0493	00680	1358

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1422 B	3591 C		2686	15126	0628	01164	1316
0500	1307	3576 B		2698	15103	0756	01754	1221
0600	1113 B	3547 B		2713	15049	0873	02409	1087
0700	0922	3526 B		2731	14994	0974	03082	0920
0800	0769	3515 B		2746	14951	1060	03740	0776
1000	0602 B	3520 C		2773	14920	1191	04930	0522
1200	0526	35157		2779	14922	1292	06064	0470
1500	0439 B	3512 B		2786	14936	1426	07915	0411
2000	0362	3506 C		2789	14988	1630	11597	0394
2500	0319	3501 C		2789	15054	1835	16361	0409
3000	0274	3496 B		2790	15120	2044	22312	0411
3500	0234	34919		2790	15190	2252	29293	0401

C-REF-NO 009 YR 1964 DEPTH 4060 WAVES 1 1322 AIR T 23.0 VIS 8
 CONS. NO 049 MONTH 6 MXSAMPD 41 WAVES 2 00X0 WET B 20.0 STN
 LAT 36-000N DAY 29 NO.DPTH 23 WND-DIR 130 WW-CODE 01
 LON 43-000W HR 03.3 W-COLOR WND-SPD 07 CLD-TPE 8
 MARSD SQ 113 C/I 1810 W-TRNSP BAKO 1027.1 CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	P04 -P-	NO2	NO3	SIO	PH
033	0000	234	36729		2515	15329					
033	0045	1911	36557	568	2620	15222				003	
033	0094	1758	36452	496	2650	15186				006	
033	0142	1730	36455	505	2658	15185				004	
033	0189	1718	36496	509	2664	15190				004	
033	0237	1706	36435	509	2662	15194				003	
033	0285	1701	36428	509	2662	15200				004	
033	0381	1616	36233	490	2668	15188				004	
033	0477	1491	36005	485	2678	15162				006	
033	0575	1400	35905	512	2690	15148				006	
033	0672	1216	35579	413	2703	15098				010	
033	0770	0977	35295	365	2724	15026				015	
033	0868	0812	35164	391	2740	14979				017	
033	0967	0675	35133	460	2758	14942				017	
033	1165	0593	35194	522	2774	14943					
047	1609	0407	35002	604	2780	14939					
047	2090	0372	34992	602	2783	15006					
047	2575	0328	34972	605	2786	15070					
047	3060	0287	34948	601	2788	15136					
047	3495	0249	34920	600	2789	15195					
047	3760	0240	34911	600	2789	15238					
047	3950	0236	34908	603	2789	15269				036	
047	4140	0227	34900	604	2789	15299				037	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2340	36729		2515	15329	0000	00000	2827
0010	2235 C	36683		2541	15304	0027	00001	2576
0020	2140 F	36641		2565	15281	0052	00005	2356
*0030	2054 H	36603		2586	15260	0075	00011	2163
0050	1885 B	36542		2625	15216	0115	00027	1792
0075	1790 D	36481		2645	15192	0157	00054	1618
0100	1751	36448		2652	15184	0197	00090	1557
0125	1732 B	36446		2656	15183	0236	00135	1524
0150	1727	36464		2659	15186	0274	00189	1509
0175	1721	3649 B		2662	15188	0312	00251	1485
0200	1715	3648 B		2663	15191	0350	00323	1482
0225	1709	3645 B		2662	15193	0387	00405	1499
0250	1706	3643 B		2662	15196	0425	00498	1514
0300	1692	3641 B		2663	15199	0502	00714	1520

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1591	3618 B		2669	15183	0653	01258	1484
0500	1472 B	3599 D		2681	15159	0799	01928	1398
0600	1360	3583 C		2693	15137	0935	02697	1303
0700	1147 B	35488		2709	15077	1059	03524	1157
0800	0921	35241		2729	15010	1166	04342	0955
1000	0652 C	3514 B		2762	14939	1327	05800	0637
1200	0576	3518 C		2775	14942	1444	07117	0521
1500	0446 B	3506 G		2781	14938	1594	09186	0463
2000	0372 B	3499 B		2783	14991	1829	13426	0462
2500	0335	34976		2785	15060	2063	18847	0455
3000	0292	34951		2788	15128	2291	25344	0442
3500	0249	34920		2789	15196	2513	32784	0424
4000	0233	34905		2789	15277	2733	41329	0433

C-REF-NO 009	YR 1964	DEPTH 4455	WAVES 1 1621	AIR T 24.5	VIS 8
CONS. NO 050	MONTH 6	MXSAMPD 45	WAVES 2 00X0	WET B 20.5	STN
LAT 36-405N	DAY 29	NO.DPTH 23	WND-DIR 160	WW-CODE 03	
LON 43-040W	HR 10.5	W-COLOR	WND-SPD 07	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1027.6	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
105	0000	228	36526		2517	15312					
105	0050	1969	36479	585	2599	15238				004	
105	0099	1784	36489	505	2647	15194				004	
105	0149	1742	36463	506	2655	15190				005	
105	0199	1732	36460	511	2657	15195				005	
105	0248	1722	36458	509	2660	15200				003	
105	0298	1717	36457	509	2661	15207				004	
105	0398	1701	36431	510	2663	15219				004	
105	0497	1596	36199	484	2670	15200				005	
105	0597	1443	35912	462	2682	15165				006	
105	0695	1299	35680	427	2694	15131				008	
105	0795	1115	35407	379	2708	15081				012	
105	0893	0887	35165	362	2729	15011				017	
105	0992	0709	35055	420	2747	14959				017	
105	1190	0549	35080	523	2770	14928				017	
120	1841	0406	35002	601	2780	14978				016	
120	2332	0352	34962	612	2783	15038				017	
120	2836	0314	34954	618	2786	15109				021	
120	3337	0271	34934	604	2788	15177				028	
120	3832	0236	34908	605	2789	15249				033	
120	4056	0230	34901	608	2789	15285				035	
120	4252	0228	34910	610	2790	15319				035	
120	4451	0228	34898	595	2789	15354				035	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2280	36526		2517	15312	0000	00000	2807
0010	2206	36519		2537	15295	0027	00001	2616
0020	2138	3651 B		2556	15279	0053	00005	2443
*0030	2075	3651 C		2573	15264	0077	00011	2287
0050	1969	36479		2599	15238	0120	00029	2045
0075	1858	36483		2628	15212	0168	00059	1779
0100	1782	36489		2647	15194	0211	00097	1602
0125	1751 C	36476		2654	15189	0250	00143	1546
0150	1742	36463		2655	15190	0289	00198	1543
0175	1735	36460		2657	15192	0328	00263	1537
0200	1732	36460		2657	15195	0367	00337	1539
0225	1726	36459		2659	15198	0406	00422	1536
0250	1722	36458		2660	15201	0444	00516	1534

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1717	36458		2661	15207	0522	00735	1540
0400	1700	36428		2663	15218	0678	01296	1555
0500	1592	36190		2670	15199	0833	02011	1512
0600	1439	35905		2682	15164	0980	02843	1415
0700	1291	35666		2695	15129	1118	03760	1309
0800	1103	35393		2709	15078	1243	04722	1169
1000	0699	35053		2748	14956	1439	06498	0772
1200	0544	35080		2771	14928	1574	07994	0553
1500	0439 I	3506 D		2781	14935	1727	10110	0458
2000	0385	34986		2781	14996	1966	14424	0480
2500	0339	34958		2784	15062	2208	20057	0473
3000	0300	34948		2787	15131	2445	26781	0455
3500	0257	34925		2789	15200	2673	34424	0435
4000	0231	34902		2789	15276	2895	43055	0432

C-REF-NO 009	YR 1964	DEPTH 4800	WAVES 1 1622	AIR T 24.0	VIS 8
CONS. NO 051	MONTH 6	MXSAMPD 50	WAVES 2 1621	WET B 21.5	STN
LAT 37-200N	DAY 29	NO.DPTH 24	WND-DIR 160	WW-CODE 03	
LON 43-010W	HR 17.4	W-COLOR	WND-SPD 08	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1026.1	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
174	0000	233	36551		2504	15325					
174	0049	1952	36558	542	2609	15235				007	
174	0098	1780	36490	482	2648	15193				005	
174	0147	1744	36461	500	2655	15190				007	
174	0196	1734	36442	505	2656	15195				006	
174	0244	1722	36426	509	2657	15199				004	
174	0293	1716	36446	507	2660	15206				004	
174	0390	1697	36408	507	2662	15216				004	
174	0491	1589	36170	495	2669	15197				005	
174	0590	1443	35918	415	2682	15164				007	
174	0690	1280	35609	420	2692	15123				010	
174	0789	1064	35322	362	2711	15061				014	
174	0890	0855	35152	374	2733	14999				017	
174	0989	0704	35078	441	2750	14956				017	
174	1190	0586	35153	515	2771	14944					
189	1570	0427	35003	595	2778	14941					
189	2072	0380	34980	609	2781	15006					
189	2570	0336	34963	619	2784	15072					
189	3076	0294	34946	611	2787	15142					
189	3567	0253	34918	613	2788	15209					
189	4070	0232	34902	606	2789	15289					
189	4570	0228	34897	614	2789	15376					
189	4770	0227	34892	610	2788	15411				038	
189	4972	0230	34893	607	2788	15448				038	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2330		36551	2504	15325	0000	00000	2927
0010	2241		36550	2530	15304	0028	00001	2688
0020	2160	B	3655 B	2553	15285	0054	00005	2475
*0030	2085	C	3655 C	2573	15267	0078	00011	2285
0050	1947		36557	2611	15233	0121	00028	1933
0075	1839	B	3652 B	2636	15207	0166	00057	1703
0100	1777		36488	2649	15193	0208	00094	1589
0125	1750	B	36471	2654	15189	0247	00140	1548
0150	1743		36460	2655	15190	0286	00195	1548
0175	1737		36449	2655	15193	0325	00260	1550
0200	1733		36440	2656	15195	0365	00336	1556
0225	1727		36430	2656	15198	0404	00421	1557
0250	1721		36428	2658	15200	0443	00517	1554

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1716	36448		2660	15207	0521	00737	1545
0400	1689	36389		2662	15215	0678	01300	1558
0500	1577	36149		2670	15194	0832	02015	1509
0600	1428	35888		2683	15161	0979	02843	1405
0700	1259	35577		2694	15117	1117	03757	1310
0800	1040	35298		2713	15054	1239	04700	1121
1000	0694	3508 B		2751	14954	1428	06407	0744
1200	0581	35151		2772	14944	1559	07875	0553
1500	0449	3504 D		2779	14939	1717	10049	0483
2000	0381 B	3498 B		2781	14994	1962	14467	0481
2500	0342	34965		2784	15063	2205	20105	0473
3000	0300	34949		2787	15131	2442	26831	0456
3500	0258	34922		2788	15200	2670	34507	0438
4000	0234	34904		2789	15277	2894	43202	0435
4500	0228	34898		2789	15363	3122	53262	0452

C-REF-NO 009 YR 1964 DEPTH 4683 WAVES 1 1622 AIR T 22.0 VIS 7
 CONS. NO 052 MONTH 6 MXSAMPD 47 WAVES 2 1522 WET B 19.9 STN
 LAT 38-010N DAY 30 NO.DPTH 24 WND-DIR 160 WW-CODE 01
 LON 42-546W HR 00.8 W-COLOR WND-SPD 10 CLD-TPE 6
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1024.5 CLD-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	P04 -P-	NO2	NO3	S10	PH
008	0000	225	36416		2517	15303					
008	0048	1968	36535	510	2603	15238				005	
008	0096	1844	36571	486	2638	15212				003	
008	0144	1766	36474	495	2650	15196				004	
008	0193	1760	36509	502	2654	15203				003	
008	0242	1742	36486	505	2657	15206				002	
008	0289	1738	36490	511	2658	15212				002	
008	0385	1726	36465	513	2659	15224				003	
008	0482	1646	36467	467	2679	15216				004	
008	0579	1463	35944	466	2680	15169				005	
008	0674	1296	35671	431	2694	15127				008	
008	0777	1078	35392	357	2714	15065				013	
008	0872	0862	35172	368	2733	14999				017	
008	0972	0701	35109	437	2752	14953				016	
008	1165	0510	35036	538	2771	14908				016	
023	1504	0432	35010	594	2778	14932				014	
023	1994	0380	34988	608	2782	14993				016	
023	2482	0338	34970	614	2785	15058				019	
023	2965	0296	34958	614	2788	15123				023	
023	3461	0260	34932	615	2789	15194				027	
023	3959	0235	34906	605	2789	15270				033	
023	4248	0228		604						035	
023	4443	0228		603						036	
023	4667	0225		607						038	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2250	36416		2517	15303	0000	00000	2805
0010	2187 B	36451		2538	15289	0027	00001	2613
0020	2128 C	36482		2556	15276	0053	00005	2438
*0030	2073 E	3651 B		2573	15264	0076	00011	2282
0050	1961	36539		2606	15237	0119	00029	1981
0075	1886 B	36569		2627	15220	0167	00059	1783
0100	1835	36563		2640	15210	0210	00098	1674
0125	1790	3651 D		2647	15201	0252	00145	1611
0150	1764	36476		2651	15197	0292	00202	1584
0175	1759 B	3649 C		2653	15200	0332	00268	1570
0200	1757	36507		2655	15203	0371	00344	1565
0225	1748	36496		2656	15205	0410	00430	1560

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1741	36486		2657	15207	0450	00526	1558
0300	1738	36488		2658	15214	0529	00749	1568
0400	1719	3648 D		2662	15225	0686	01316	1561
0500	1615 B	3638 G		2679	15209	0837	02010	1428
0600	1427	3587 B		2682	15160	0981	02820	1413
0700	1244	35598		2699	15112	1116	03720	1264
0800	1024	35330		2719	15048	1234	04624	1069
1000	0665	35095		2756	14943	1412	06232	0689
1200	0494 B	35030		2773	14907	1534	07600	0519
1500	0432	35010		2778	14931	1686	09708	0482
2000	0379	34988		2782	14994	1928	14070	0471
2500	0336	34970		2785	15061	2166	19580	0461
3000	0293	34956		2788	15128	2396	26103	0440
3500	0258	34932		2789	15200	2618	33574	0430
4000	0234							
4500	0226							

C-REF-NO 009	YR 1964	DEPTH 4857	WAVES 1 1622	AIR T 23.0	VIS 8
CONS. NO 053	MONTH 6	MXSAMPD 50	WAVES 2 1522	WET B 20.5	STN
LAT 38-416N	DAY 30	NO.DPTH 25	WND-DIR 160	WW-CODE 03	
LON 42-574W	HR 08.2	W-COLOR	WND-SPD 12	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1023.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
082	0000	235	36592		2501	15330					
082	0049	1942	36617	552	2617	15232				003	
082	0099	1837	36560	502	2639	15211				003	
082	0148	1750	36458	497	2653	15192				004	
082	0198	1735	36460	497	2657	15196				006	
082	0248	1724	36447	505	2658	15201				003	
082	0298	1712	36427	504	2660	15205				003	
082	0397	1675	36339	497	2662	15209				003	
082	0496	1493	35957	457	2674	15165				006	
082	0596	1356	35740	398	2687	15135				008	
082	0696	1130	35415	360	2706	15070				013	
082	0796	0865	35143	356	2731	14987				017	
082	0896	0691		424						018	
082	0996	0652	35121	472	2760	14938				016	
082	1196	0505	35045	552	2773	14911					
098	1527	0415	34992	584	2779	14929					
098	2020	0370	34960	614	2781	14993					
098	2520	0348	34968	607	2784	15069					
098	3025	0305	34952	616	2786	15138					
098	3524	0271	34936	614	2788	15210					
098	4024	0241	34919	611	2789	15285					
098	4425	0231	34910	614	2790	15351					
098	4625	0228	34911	619	2790	15386					
098	4825	0227	34914	631	2790	15421				026	
098	5025	0224		638						022	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2350	36592		2501	15330	0000	00000	2954
0010	2264 E	36601		2527	15311	0028	00001	2713
0020	2184 I	36607		2550	15292	0055	00005	2497
*0030	2111 I	36611		2571	15275	0079	00012	2305
0050	1938	36617		2617	15232	0121	00028	1869
0075	1867 F	36596		2634	15215	0166	00057	1717
0100	1835	36558		2639	15210	0209	00095	1677
0125	1785	3650 B		2648	15199	0250	00143	1608
0150	1749	36457		2653	15192	0290	00199	1563
0175	1737 B	3645 B		2656	15193	0329	00265	1547
0200	1735	36460		2657	15196	0368	00340	1545
0225	1729	36454		2658	15199	0407	00425	1545

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1724	36446		2658	15201	0446	00520	1546
0300	1712	36427		2660	15206	0524	00740	1551
0400	1670	36328		2662	15208	0681	01304	1558
0500	1488	35948		2675	15164	0833	02005	1459
0600	1348	35728		2688	15132	0975	02806	1354
0700	1119	35402		2707	15067	1103	03652	1168
0800	0856	35139		2732	14984	1208	04460	0921
1000	0649	35120		2760	14937	1367	05901	0648
1200	0503	35044		2773	14911	1485	07229	0522
1500	0418	34994		2778	14925	1637	09326	0474
2000	0371	34960		2781	14990	1879	13697	0478
2500	0349	34968		2783	15066	2123	19377	0481
3000	0307	34953		2786	15134	2365	26222	0464
3500	0272	34937		2788	15206	2598	34077	0450
4000	0242	34920		2789	15281	2826	42918	0438
4500	0230	34910		2790	15364	3053	52939	0446
5000	0224							

C-REF-NO 009	YR 1964	DEPTH 4722	WAVES 1 1734	AIR T 23.0	VIS 7
CONS. NO 054	MONTH 6	MXSAMPD 48	WAVES 2 1623	WET B 21.5	STN
LAT 39-000N	DAY 30	NO.DPTH 24	WND-DIR 170	WW-CODE 01	
LON 42-525W	HR 13.8	W-COLOR	WND-SPD 15	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1021.1	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
138	0000	220	36237		2518	15289						
138	0049	1766	36293	572	2636	15179					002	
138	0099	1695	36377	511	2660	15167					005	
138	0148	1647	36294	500	2665	15160					004	
138	0197	1567	36150	503	2672	15141					005	
138	0247	1512	36056	505	2678	15131					005	
138	0296	1451	35958	496	2683	15119					005	
138	0395	1398	35895	516	2690	15117					005	
138	0493	1294	35708	478	2697	15097					007	
138	0593	1153	35511	412	2709	15062					010	
138	0690	0982	35291	392	2723	15015					014	
138	0788	0827	35177	400	2739	14972					016	
138	0887	0698	35099	445	2752	14937					016	
138	0985	0599	35028	500	2760	14914					015	
138	1183	0494	35012	562	2771	14904					014	
167	1543	0409	34980	606	2778	14929					014	
167	2026	0372	34962	616	2781	14995					015	
167	2508	0337	34958	619	2784	15062					017	
167	2987	0301	34954	614	2787	15129					020	
167	3465	0265	34932	610	2788	15197					025	
167	3924	0238	34917	617	2790	15266					026	
167	4419	0229		619							030	
167	4614	0228	34903	624	2789	15384					025	
167	4804	0225	34916	642	2791	15416					022	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2200	36237		2518	15289	0000	00000	2799
0010	2108 F	3626 B		2545	15267	0027	00001	2542
0020	2023 I	3628 D		2569	15246	0051	00005	2314
*0030	1947 I	3630 E		2591	15227	0074	00011	2113
0050	1763	36295		2637	15178	0112	00026	1679
0075	1704 G	3635 C		2655	15165	0152	00051	1516
0100	1694	36376		2660	15167	0190	00085	1479
0125	1670	3635 B		2664	15163	0227	00128	1454
0150	1644	36288		2665	15159	0263	00179	1445
0175	1603	3622 B		2669	15150	0299	00239	1416
0200	1563	36144		2673	15141	0335	00307	1389
0225	1535	36094		2675	15135	0369	00383	1370
0250	1508	36049		2678	15130	0404	00467	1353

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1448	35955		2684	15118	0471	00656	1310
0400	1394	35887		2690	15116	0601	01125	1275
0500	1285	35695		2698	15095	0727	01706	1224
0600	1141	35494		2710	15059	0846	02372	1118
0700	0965	35276		2725	15010	0952	03079	0984
0800	0810	35166		2741	14967	1043	03781	0827
1000	0588	35024		2761	14912	1191	05125	0630
1200	0488	35010		2772	14904	1308	06440	0526
1500	0414	34984		2778	14924	1460	08552	0477
2000	0373	34962		2781	14991	1704	12944	0480
2500	0338	34958		2784	15061	1946	18569	0472
3000	0300	34953		2787	15131	2182	25259	0452
3500	0262	34931		2789	15202	2410	32914	0439
4000	0236	34913		2789	15278	2633	41583	0432
4500	0229	34902		2789	15364	2859	51587	0450

C-REF-NO 009	YR 1964	DEPTH 4660	WAVES 1 1734	AIR T 22.0	VIS 6
CONS. NO 055	MONTH 6	MXSAMPD 48	WAVES 2 1623	WET B 20.7	STN
LAT 39-187N	DAY 30	NO.DPTH 24	WND-DIR 170	WW-CODE 03	
LON 42-582W	HR 21.7	W-COLOR	WND-SPD 15	CLO-TPE 6	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1019.4	CLO-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
217	0000	207	36272		2556	15255					
217	0048	1692	36265	544	2652	15156				003	
217	0097	1534	36078	547	2674	15114				005	
217	0145	1497	36071	543	2682	15110				006	
217	0193	1447	35960	521	2685	15101				006	
217	0242	1407	35903	523	2689	15095				006	
217	0290	1435	36011	535	2691	15113				005	
217	0386	1392	35908	530	2692	15114				005	
217	0485	1308	35747	513	2697	15100				007	
217	0581	1241	35662	535	2704	15093				006	
217	0678	1056	35359	384	2715	15040				013	
217	0777	0854	35150	378	2733	14980				016	
217	0872	0669	35041	447	2751	14923				016	
217	0973	0589	35041	444	2762	14908				015	
217	1168	0501	35040	556	2773	14905					
232	1529	0400	34967	618	2778	14922					
232	2028	0372	34966	613	2781	14995					
232	2530	0337	34958	619	2784	15066					
232	3025	0299	34960	616	2788	15135					
232	3526	0259	34951	615	2790	15205					
232	4025	0234	34922	614	2790	15282					
232	4420	0227	34914	611	2790	15349					
232	4615	0227	34924	617	2791	15384				030	
232	4798	0228	34930	624	2791	15417				026	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2070	36272		2556	15255	0000	00000	2432
0010	1981 B	3626 D		2579	15233	0023	00001	2220
0020	1899 C	3624 G		2599	15211	0045	00004	2032
*0030	1825 D	3623 I		2617	15192	0064	00009	1866
0050	1682	36257		2654	15154	0099	00023	1521
0075	1583 B	3616 E		2670	15126	0135	00046	1378
0100	1530	36077		2675	15113	0169	00077	1334
0125	1506 C	3607 D		2680	15109	0202	00115	1295
0150	1492	36061		2682	15109	0235	00161	1279
0175	1466	3601 B		2684	15104	0267	00214	1273
0200	1439	35945		2685	15099	0299	00276	1268
0225	1416	3591 B		2687	15095	0331	00345	1254
0250	1411	3592 B		2689	15098	0362	00422	1243

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVa
0300	1434	3601 B		2691	15115	0425	00599	1240
0400	1381	35885		2693	15112	0551	01051	1251
0500	1301 B	3574 B		2698	15100	0675	01628	1223
0600	1210 B	3561 C		2706	15084	0796	02309	1166
0700	1011	35304		2719	15027	0908	03052	1044
0800	0804 B	35115		2738	14964	1004	03788	0855
1000	0574	35042		2764	14906	1151	05121	0596
1200	0489	35034		2774	14905	1263	06381	0510
1500	0405	34973		2778	14920	1412	08452	0473
2000	0372	34965		2781	14990	1654	12812	0477
2500	0339	34958		2784	15062	1896	18436	0474
3000	0301	34960		2787	15132	2131	25116	0449
3500	0261	34952		2790	15202	2354	32585	0421
4000	0235	34923		2790	15278	2570	40999	0423
4500	0227	34918		2791	15363	2791	50736	0436

C-REF-NO 009 YR 1964 DEPTH 4579 WAVES 1 1533 AIR T 21.5 VIS 6
 CONS. NO 056 MONTH 7 MXSAMPD 47 WAVES 2 1644 WET B 20.5 STN
 LAT 39-551N DAY 01 NO.DPTH 24 WND-DIR 150 WW-CODE 01
 LON 43-088W HR 04.9 W-COLOR WND-SPD 14 CLD-TPE 6
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1016.2 CLD-AMT 4 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
049	0000	201	36296		2574	15239						
049	0047	1701	36241	583	2648	15158					002	
049	0094	1572	36219	508	2677	15127					005	
049	0142	1541	36159	535	2679	15124					004	
049	0189	1478	36083	525	2687	15111					007	
049	0237	1437	35997	528	2690	15105					005	
049	0285	1444	36035	533	2691	15116					006	
049	0380	1441	36035	533	2692	15130					005	
049	0479	1352	35838	512	2695	15115					006	
049	0576	1234	35630	478	2703	15089					010	
049	0674	1035	35340	380	2718	15032					014	
049	0772	0830	35172	391	2738	14970					017	
049	0870	0688	35075	442	2752	14930					016	
049	0970	0576	35026	506	2762	14902					016	
049	1168	0480	35037	571	2775	14896					015	
066	1568	0390	34962	620	2779	14925					014	
066	2065	0361	34941	621	2780	14996					014	
066	2559	0335	34958	616	2784	15070					017	
066	3053	0300	34962	622	2788	15140					018	
066	3551	0260	34935	624	2789	15210					022	
066	4040	0232	34911	623	2790	15284					027	
066	4329	0226	34922	624	2791	15332					026	
066	4520	0224	34916	636	2791	15365					023	
066	4712	0224		638								

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2010	36296		2574	15239	0000	00000	2262
0010	1936 B	36287		2593	15220	0022	00001	2086
0020	1867 C	3628 B		2610	15203	0042	00004	1930
*0030	1806 D	3627 B		2625	15187	0061	00009	1792
0050	1689	36240		2641	15155	0094	00022	1549
0075	1607 B	36228		2669	15135	0131	00046	1384
0100	1566 B	36213		2677	15126	0165	00076	1312
0125	1548 C	36183		2679	15124	0198	00114	1302
0150	1531	36147		2680	15122	0231	00161	1299
0175	1497	36107		2685	15115	0263	00214	1265
0200	1465	3606 B		2688	15109	0295	00275	1241
0225	1444	3601 B		2689	15105	0326	00343	1236
0250	1437	3600 B		2690	15107	0357	00419	1237

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1447	36044		2691	15119	0420	00596	1242
0400	1428	3600 B		2692	15129	0546	01051	1261
0500	1331	35797		2696	15111	0672	01634	1241
0600	1189	3556 B		2706	15077	0794	02319	1163
0700	0978	35286		2723	15015	0903	03045	0999
0800	0785	35138		2743	14957	0994	03744	0807
1000	0555 B	3502 B		2765	14898	1135	05024	0583
1200	0469	35032		2776	14897	1243	06239	0484
1500	0398	3498 B		2779	14917	1387	08233	0460
2000	0362	34940		2780	14986	1626	12565	0481
2500	0338	34955		2783	15061	1870	18215	0474
3000	0304	34963		2787	15133	2106	24922	0452
3500	0264	34938		2789	15203	2333	32547	0435
4000	0234	34912		2789	15278	2555	41159	0429
4500	0224	34916		2791	15362	2776	50920	0432

C-REF-NO 009 YR 1964 DEPTH 4663 WAVES 1 1522 AIR T 18.5 VIS 5
 CONS. NO 057 MONTH 7 MXSAMPD 48 WAVES 2 1733 WET B 18.5 STN
 LAT 40-341N DAY 01 NO.DPTH 24 WND-DIR 310 WW-CODE 61
 LON 43-070W HR 13.2 W-COLOR WND-SPD 04 CLD-TPE 7
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1016.6 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
132	0000	195	36180		2581	15221						
132	0049	1608	36223	533	2669	15131					004	
132	0098	1530	36117	506	2678	15113					005	
132	0148	1462	36144	533	2695	15100					005	
132	0197	1458	36077	539	2691	15106					005	
132	0246	1462	36142	543	2695	15116					004	
132	0295	1460	36137	545	2695	15124					004	
132	0394	1464	36100	540	2692	15141					004	
132	0489	1466	36107	541	2692	15157					004	
132	0584	1467	36105	542	2691	15173					004	
132	0677	1456	36075	537	2691	15185					004	
132	0773	1304	35791	483	2701	15147					007	
132	0868	1096	35474	371	2717	15087					013	
132	0965	0852	35174	376	2735	15010					016	
132	1157	0646	35164	472	2764	14963						
150	1413	0529	35106	547	2775	14958						
150	1882	0404	34986	608	2779	14984						
150	2359	0358	34954	623	2781	15045						
150	2849	0324	34953	622	2785	15115						
150	3337	0285	34946	623	2788	15183						
150	3824	0245	34918	626	2789	15251						
150	4329	0227		623								
150	4634	0225	34900	639	2789	15386					023	
150	4833	0224	34913	640	2790	15421					020	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1950	36180		2581	15221	0000	00000	2195
0010	1878 D	3618 C		2600	15203	0021	00001	2022
0020	1811 G	3618 F		2616	15186	0041	00004	1866
*0030	1750 I	3618 H		2631	15169	0059	00009	1728
0050	1605	36221		2669	15130	0090	00021	1375
0075	1549 E	3617 D		2678	15116	0124	00043	1301
0100	1527	36118		2679	15112	0157	00072	1296
0125	1489	3613 C		2688	15105	0188	00108	1215
0150	1461	36141		2695	15100	0218	00150	1156
0175	1455	3611 C		2694	15102	0248	00200	1179
0200	1458	36080		2691	15107	0278	00258	1210
0225	1460	3611 C		2693	15112	0308	00324	1199
0250	1462	36143		2695	15117	0338	00397	1187

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1460	36135		2695	15124	0398	00568	1204
0400	1464	36100		2692	15142	0523	01018	1268
0500	1466	36108		2692	15159	0653	01618	1297
0600	1470 B	3611 B		2691	15177	0785	02370	1334
0700	1429 B	3602 B		2693	15179	0920	03272	1339
0800	1249	35702		2706	15132	1050	04269	1226
1000	0797 C	3514 G		2741	14995	1261	06184	0858
1200	0619 B	35156		2767	14959	1409	07835	0605
1500	0498	35081		2776	14960	1581	10201	0522
2000	0388	34972		2780	14997	1839	14845	0495
2500	0348	34952		2782	15065	2090	20671	0491
3000	0312	34952		2786	15137	2335	27643	0472
3500	0270	34937		2788	15206	2570	35532	0447
4000	0236	34908		2789	15279	2797	44326	0437
4500	0225	34898		2789	15362	3024	54345	0447

C-REF-NO 009	YR 1964	DEPTH 4788	WAVES 1 3222	AIR T 17.5	VIS 6
CONS. NO 058	MONTH 7	MXSAMPD 48	WAVES 2 1433	WET B 16.5	STN
LAT 41-022N	DAY 01	NO.DPTH 25	WND-DIR 320	WW-CODE 60	
LON 43-072W	HR 21.2	W-COLOR	WND-SPD 15	CLD-TPE 7	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1014.8	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SID	PH
212	0000	190	35881		2571	15204					
212	0048	1542	36130	541	2677	15109				004	
212	0097	1470	36127	549	2692	15094				005	
212	0146	1473	36150	541	2693	15103				005	
212	0195	1474	36151	544	2693	15112				005	
212	0243	1472	36156	544	2694	15119				004	
212	0292	1474	36155	544	2694	15128				004	
212	0391	1475	36158	544	2694	15144				004	
212	0490	1480	36157	544	2692	15162				003	
212	0585	1482	36151	541	2692	15179				004	
212	0681	1482	36151	544	2692	15194				003	
212	0783	1483	36160	544	2692	15212				003	
*251	0900	1482	36175	549	2693	15231				003	
*251	1000	1422	36023	521	2695	15226				005	
212	1181	0742	35088	414	2745	15003				018	
234	1367	0578	35086	503	2767	14970				015	
234	1844	0401	34964	619	2778	14976				015	
234	2333	0368	34994	619	2784	15046				015	
234	2849	0330	34956	618	2784	15118				019	
234	3331	0295	34957	614	2788	15187				022	
234	3810	0249	34930	616	2790	15251				028	
234	4188	0233	34908	612	2789	15310				033	
234	4377	0230	34920	617	2790	15342				031	
234	4567	0229	34901	622	2789	15376				031	
234	4756	0230	34917	629	2790	15410				026	

#MULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1900		35881	2571	15204	0000	00000	2289
0010	1818 D	3593 C		2596	15183	0022	00001	2060
0020	1744 G	3598 F		2618	15164	0042	00004	1856
*0030	1678 I	3602 H		2637	15146	0059	00009	1678
0050	1535	36132		2678	15107	0089	00020	1289
0075	1479 E	3614 D		2692	15094	0120	00040	1170
0100	1469	36128		2693	15094	0150	00067	1167
0125	1467 B	36140		2694	15098	0179	00100	1162
0150	1473	36150		2693	15104	0208	00142	1175
0175	1474	36152		2693	15109	0238	00192	1183

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0200	1474	36152		2693	15113	0268	00249	1190
0225	1473	36154		2694	15116	0298	00315	1194
0250	1472	36156		2694	15120	0328	00388	1199
0300	1474	36155		2694	15129	0389	00561	1219
0400	1475	36158		2694	15146	0514	01010	1250
0500	1480	36156		2692	15164	0642	01604	1292
0600	1482	36151		2692	15181	0774	02354	1330
0700	1482	36152		2692	15198	0910	03262	1359
0800	1485	3617 B		2692	15215	1049	04332	1383
1000	1422	36023		2695	15226	1331	06948	1408
1200	0712 D	3507 E		2747	14994	1556	09431	0812
1500	0504 D	3505 D		2773	14961	1763	12252	0551
2000	0382 C	3497 C		2780	14995	2027	16980	0489
2500	0356	3498 B		2784	15069	2274	22709	0480
3000	0320	34956		2785	15140	2520	29682	0481
3500	0278	34949		2789	15209	2758	37669	0450
4000	0239	34915		2789	15280	2985	46486	0436
4500	0229	34907		2790	15364	3212	56494	0447

C-REF-NO 009 YR 1964 DEPTH 4802 WAVES 1 3221 AIR T 18.0 VIS 7
 CONS. NO 059 MONTH 7 MXSAMPD 48 WAVES 2 1532 WET B 16.0 STN
 LAT 41-029N DAY 02 NO.DPTH 24 WND-DIR 290 WW-CODE 03
 LON 42-113W HR 06.7 W-COLOR WND-SPD 07 CLD-TPE 8
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1016.2 CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
067	0000	195	36245		2586	15222						
067	0049	1698	36331	514	2656	15159					004	
067	0098	1601	36224	503	2670	15136					005	
067	0148	1519	36081	505	2678	15117					005	
067	0197	1479	36041	525	2684	15112					005	
067	0246	1456	36039	538	2689	15113					004	
067	0295	1445	36027	536	2690	15117					005	
067	0393	1458	36065	541	2690	15138					005	
067	0492	1453	36046	541	2690	15153					005	
067	0590	1357	35835	513	2694	15135					006	
067	0686	1222	35590	550	2702	15103					009	
067	0782	1023	35317	364	2718	15045					015	
067	0877	0824	35137	390	2736	14985					016	
067	0976	0672	35056	443	2752	14941					017	
067	1175	0542	35054	530	2769	14923						
087	1505	0415	34967	614	2777	14925						
087	2034	0371	34942	624	2779	14995						
087	2501	0346	34952	624	2782	15065						
087	3004	0312	34946	618	2785	15137						
087	3477	0275		619								
087	3949	0240	34934	618	2791	15271						
087	4450	0230	34924	623	2791	15355						
087	4650	0228	34914	621	2790	15390					028	
087	4846	0229	34913	635	2790	15425					024	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1950	36245		2586	15222	0000	00000	2148
0010	1896 B	3627 B		2602	15209	0021	00001	2005
0020	1846 D	3628 C		2616	15197	0040	00004	1875
*0030	1800 F	3630 D		2628	15185	0059	00009	1759
0050	1695	36330		2656	15158	0092	00022	1498
0075	1636 C	3629 B		2667	15144	0128	00045	1403
0100	1597	36218		2671	15136	0163	00077	1377
0125	1553	3614 B		2675	15125	0197	00116	1343
0150	1517	36078		2678	15117	0231	00163	1320
0175	1493	36050		2681	15113	0264	00218	1298
0200	1477	36040		2684	15112	0296	00281	1278
0225	1464	36038		2687	15112	0328	00351	1260
0250	1455	36038		2689	15113	0360	00428	1248

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1445	36029		2690	15118	0423	00606	1250
0400	1459	36068		2690	15140	0551	01066	1281
0500	1448	36033		2690	15152	0682	01672	1311
0600	1345	35811		2695	15133	0813	02413	1288
0700	1195	35548		2704	15095	0939	03253	1206
0800	0983	35276		2721	15033	1052	04123	1037
1000	0649 B	3505 B		2755	14936	1228	05714	0698
1200	0529	35048		2770	14921	1354	07135	0554
1500	0416	34969		2777	14924	1514	09332	0491
2000	0371	34941		2779	14989	1763	13844	0493
2500	0346	34952		2782	15065	2013	19645	0488
3000	0312	34946		2785	15136	2259	26637	0476
3500	0273	34940		2788	15207	2496	34578	0449
4000	0238	34934		2791	15280	2719	43230	0422
4500	0229	34921		2791	15364	2940	52975	0438

C-REF-NO 009	YR 1964	DEPTH 4797	WAVES 1 3021	AIR T 21.0	VIS 8
CONS. NO 060	MONTH 7	MXSAMPD 49	WAVES 2 1522	WET B 17.0	STN
LAT 41-225N	DAY 02	NO.DPTH 24	WND-DIR 300	WW-CODE 01	
LON 41-091W	HR 17.6	W-COLOR	WND-SPD 03	CLD-TPE 0	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1019.6	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
176	0000	203	36275		2567	15244						
176	0049	1675	36351	511	2663	15152					005	
176	0098	1570	36240	535	2679	15127					005	
176	0148	1492	35995	522	2677	15108					005	
176	0197	1413		530							005	
176	0246	1416	35946	533	2690	15099					005	
176	0295	1364	35850	526	2694	15089					006	
176	0393	1294	35702	502	2697	15080					007	
176	0492	1210	35608	521	2706	15067					007	
176	0590	1149	35499	548	2709	15060					007	
176	0688	0941	35187	394	2722	14998					015	
176	0787	0771	35101	399	2742	14949					017	
176	0885	0639	35028	472	2754	14913					016	
176	0984	0515	34966	543	2765	14879					015	
176	1183	0441	34961	604	2773	14881					013	
189	1490	0397	34944	621	2777	14914					013	
189	1989	0362	34930	629	2779	14984					014	
189	2488	0340	34946	627	2783	15060					016	
189	2987	0305	34944	622	2786	15131					019	
189	3474	0274	34933	624	2788	15202					021	
189	3962	0240	34918	624	2789	15273					025	
189	4467	0227	34906	629	2790	15357					026	
189	4669	0226	34905	639	2790	15392					023	
189	4867	0223	34913	647	2790	15427					020	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2030	36275		2567	15244	0000	00000	2328
0010	1954 D	36301		2589	15226	0022	00001	2121
0020	1884 G	36321		2609	15208	0043	00004	1937
*0030	1819 I	36338		2626	15191	0062	00009	1776
0050	1671	36350		2664	15151	0094	00022	1429
0075	1602 E	36312		2677	15134	0128	00044	1311
0100	1567	36230		2679	15126	0161	00073	1301
0125	1526	36110		2678	15116	0194	00111	1311
0150	1488	35992		2678	15107	0227	00158	1321
0175	1444 B	35961		2685	15096	0260	00212	1257
0200	1413	35951		2691	15090	0291	00272	1214
0225	1413 C	35946		2690	15095	0322	00339	1225
0250	1413	35939		2690	15099	0353	00415	1233

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1360	35841		2694	15088	0414	00589	1211
0400	1288	35695		2697	15079	0536	01027	1202
0500	1207	35603		2706	15067	0654	01571	1139
0600	1130 B	3547 B		2710	15055	0768	02215	1118
0700	0918	3517 B		2724	14991	0874	02921	0982
0800	0752	35091		2744	14944	0964	03608	0792
1000	0504 B	34963		2766	14877	1101	04851	0560
1200	0437	34960		2774	14883	1208	06055	0495
1500	0396	34943		2777	14915	1356	08121	0482
2000	0362	34930		2779	14985	1603	12573	0488
2500	0339	34946		2783	15062	1850	18309	0483
3000	0304	34944		2786	15133	2092	25178	0466
3500	0272	34932		2788	15206	2327	33070	0453
4000	0238	34917		2789	15280	2554	41889	0434
4500	0227	34905		2790	15363	2779	51843	0444

C-REF-NO 009	YR 1964	DEPTH 4455	WAVES 1 00X0	AIR T 20.0	VIS 8
CONS. NO 061	MONTH 7	MXSAMPD 47	WAVES 2 1522	WET B 17.5	STN
LAT 41-245N	DAY 03	NO.DPTH 24	WND-DIR 150	WW-CODE 01	
LON 39-526W	HR 02.4	W-COLOR	WND-SPD 04	CLD-TPE X	
MARSD SQ 148	C/I 1810	W-TRNSP	BARO 1019.6	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
024	0000	209	36401		2561	15262					
024	0049	1730	36408	507	2654	15169				004	
024	0098	1691	36370	506	2660	15165				005	
024	0148	1632	36297	508	2669	15155				005	
024	0197	1558	36126	509	2673	15138				005	
024	0246	1479	36018	527	2682	15120				005	
024	0296	1440	35965	526	2686	15115				005	
024	0395	1430	36006	543	2692	15129				005	
024	0493	1366	35860	529	2694	15122				007	
024	0592	1248	35665	554	2703	15097				008	
024	0691	1038	35358	398	2718	15036				014	
024	0789	0812	35120	395	2737	14965				017	
024	0888	0662	35059	458	2754	14923				017	
024	0987	0570	35057	511	2766	14903				016	
024	1187	0478	35013	575	2773	14898					
044	1558	0396		619							
044	2018	0366	34965	619	2781	14991					
044	2493	0332	34958	623	2784	15057					
044	3006	0292	34938	640	2786	15129					
044	3493	0274	34933	636	2788	15206					
044	3983	0237	34914	618	2789	15276					
044	4276	0228	34904	618	2789	15323					
044	4472	0226	34904	631	2790	15357				030	
044	4667	0227	34904	626	2789	15393				027	

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2090	36401		2561	15262	0000	00000	2391
0010	2016 E	36405		2581	15244	0023	00001	2201
0020	1948 I	36408		2599	15227	0044	00004	2033
*0030	1887 I	36409		2615	15211	0064	00009	1885
0050	1728	36408		2654	15169	0098	00023	1516
0075	1690 G	36393		2662	15162	0136	00047	1450
0100	1689	36368		2661	15165	0173	00080	1473
0125	1661	36339		2665	15161	0209	00122	1440
0150	1629	36290		2669	15154	0245	00173	1411
0175	1593	3621 B		2671	15146	0281	00232	1400
0200	1553	36118		2673	15137	0316	00300	1384

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0225	1511	36057		2678	15127	0350	00375	1345
0250	1475	36012		2682	15119	0383	00456	1309
0300	1439	35967		2687	15116	0449	00641	1283
0400	1428	36001		2692	15129	0577	01102	1263
0500	1360	35849		2694	15121	0705	01692	1262
0600	1233	35641		2704	15093	0828	02389	1187
0700	1016	35331		2720	15029	0941	03134	1033
0800	0792	35107		2739	14959	1035	03860	0842
1000	0562	35055		2767	14901	1178	05155	0570
1200	0474	35011		2774	14898	1287	06383	0506
1500	0403	3498 C		2779	14919	1435	08430	0466
2000	0366	34965		2781	14988	1673	12721	0470
2500	0331	34958		2784	15059	1910	18233	0463
3000	0292	34938		2786	15128	2143	24858	0451
3500	0273	34933		2788	15207	2375	32658	0455
4000	0236	34913		2789	15279	2603	41484	0433
4500	0226	34903		2789	15363	2828	51427	0444

C-REF-NO 009 YR 1964 DEPTH 4576 WAVES 1 1421 AIR T 20.9 VIS 8
 CONS. NO 062 MONTH 7 MXSAMPD 47 WAVES 2 1522 WET B 18.5 STN
 LAT 40-410N DAY 03 NO.DPTH 24 WND-DIR 140 WW-CODE 01
 LON 39-525W HR 10.8 W-COLOR WND-SPD 07 CLD-TPE 4
 MARSD SQ 148 C/I 1810 W-TRNSP BARO 1020.4 CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
108	0000	206	36336		2564	15253						
108	0046	1727	36345	553	2650	15167					002	
108	0092	1630	36249	523	2666	15145					004	
108	0139	1574	36205	530	2675	15135					004	
108	0186	1525	36128	524	2680	15126					004	
108	0232	1467	36089	516	2690	15115					004	
108	0279	1425		522							006	
108	0370	1427	36012	535	2693	15124					004	
108	0465	1383	35957	524	2698	15124					005	
108	0557	1282	35857	436	2711	15105					006	
108	0646	1188	35624	452	2711	15085					009	
108	0740	1008	35417	387	2728	15034					013	
108	0832	0776	35115	406	2742	14959					016	
108	0928	0655	35118	458	2759	14928					016	
108	1128	0524	35055	539	2771	14907					014	
127	1319	0451		590							014	
127	1814	0371		634							014	
127	2306	0353		624							016	
127	2791	0320		612							019	
127	3289	0280		618							022	
127	3788	0243		619							026	
127	4290	0227		615							035	
127	4491	0226	34911	618	2790	15361					031	
127	4698	0225	34912	640	2790	15397					023	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2060	36336		2564	15253	0000	00000	2360
0010	1983 C	3633 B		2584	15234	0023	00001	2169
0020	1912 F	3633 C		2602	15216	0044	00004	2000
*0030	1848 H	3633 E		2618	15200	0063	00009	1851
0050	1713 B	36338		2653	15164	0097	00023	1533
0075	1650 D	3629 B		2664	15148	0135	00047	1434
0100	1619	36241		2668	15142	0170	00079	1407
0125	1588	36217		2673	15137	0205	00119	1365
0150	1563	36187		2676	15133	0239	00167	1340
0175	1537	36146		2679	15128	0273	00223	1321
0200	1507	36114		2683	15123	0306	00286	1288
0225	1476	36094		2689	15117	0338	00356	1244
0250	1448	36077		2693	15112	0369	00431	1206

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1423 B	36048		2697	15111	0429	00602	1189
0400	1419	35997		2693	15126	0552	01045	1247
0500	1348	3593 B		2703	15118	0674	01610	1178
0600	1241 B	3575 B		2711	15097	0791	02265	1122
0700	1093	3551 B		2720	15059	0900	02994	1042
0800	0853 C	3521 E		2738	14984	0996	03734	0866
1000	0595 B	3510 B		2766	14915	1143	05063	0584
1200	0492	3504 B		2774	14906	1254	06309	0509
1500	0409 B	3499 H		2779	14922	1402	08362	0466
2000	0362 B	3492 I		2778	14985	1646	12788	0495
2500	0341	3487 I		2777	15061	1909	18924	0537
3000	0303	3485 I		2778	15131	2182	26675	0532
3500	0263	3485 I		2782	15201	2445	35509	0498
4000	0234	3487 I		2786	15277	2691	45022	0460
4500	0225	3489 E		2789	15362	2925	55340	0452

C-REF-NO 009	YR 1964	DEPTH 4445	WAVES 1 1522	AIR T 22.0	VIS 8
CONS. NO 063	MONTH 7	MXSAMPD 45	WAVES 2 2334	WET B 19.5	STN
LAT 40-017N	DAY 03	NO.DPTH 24	WND-DIR 150	WW-CODE 03	
LON 40-026W	HR 19.0	W-COLOR	WND-SPD 07	CLD-TPE 6	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1020.1	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
190	0000	219	36480		2539	15289					
190	0049	1854	36337	563	2618	15204				003	
190	0098	1717	36345	487	2652	15173				005	
190	0148	1704	36444	498	2663	15178				004	
190	0197	1668	36337	494	2663	15174				004	
190	0247	1603	36216	490	2669	15161				004	
190	0296	1531	36093	487	2676	15146				004	
190	0393	1418	35931	512	2689	15124				005	
190	0492	1351	35804	486	2693	15117				006	
190	0589	1178	35587	393	2711	15071				021	
190	0684	0949	35229	352	2724	15001				018	
190	0781	0870	35294	405	2742	14988				017	
190	0876	0793	35308	436	2755	14975				016	
190	0972	0619	35086	481	2762	14920				016	
190	1166	0531		538							
213	1530	0458	35072	579	2780	14948					
213	2015	0363	34951	624	2781	14989					
213	2503	0329	34954	622	2784	15058					
213	2985	0291	34948	618	2787	15125					
213	3485	0251	34930	616	2789	15194					
213	3985	0227	34912	615	2790	15272					
213	4180	0223	34905	613	2790	15304					
213	4367	0222	34902	615	2790	15337				035	
213	4541	0222	34910	636	2790	15368				025	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2190	36480		2539	15289	0000	00000	2597
0010	2111	36443		2558	15270	0025	00001	2418
0020	2039 B	36412		2575	15252	0049	00005	2258
*0030	1973 C	3639 B		2591	15235	0071	00010	2115
0050	1850	36336		2619	15203	0111	00027	1855
0075	1761 B	36326		2640	15182	0155	00055	1662
0100	1715	36350		2653	15173	0195	00091	1547
0125	1704 C	3641 D		2660	15174	0234	00135	1487
0150	1703	36442		2663	15178	0271	00187	1469
0175	1687	3640 C		2663	15177	0308	00249	1472
0200	1665	36330		2664	15174	0345	00321	1479
0225	1634	36270		2666	15168	0382	00401	1461
0250	1599	36208		2670	15160	0419	00490	1435

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1525	36085		2677	15145	0490	00691	1380
0400	1414	35923		2689	15124	0624	01173	1292
0500	1340	35791		2694	15114	0753	01769	1263
0600	1149 B	3554 C		2712	15062	0873	02439	1101
0700	0931 B	3523 D		2726	14996	0977	03132	0961
0800	0858 B	3531 B		2745	14987	1066	03815	0801
1000	0594 C	3519 I		2773	14916	1200	05024	0519
1200	0522	3512 I		2776	14919	1302	06183	0493
1500	0462	3507 E		2780	14945	1450	08231	0477
2000	0365	34955		2781	14987	1692	12597	0476
2500	0329	34954		2784	15057	1931	18136	0462
3000	0290	34948		2787	15127	2161	24672	0441
3500	0250	34929		2790	15197	2381	32060	0420
4000	0227	34911		2790	15274	2596	40402	0418
4500	0222	34908		2790	15361	2814	50060	0434

C-REF-NO 009	YR 1964	DEPTH 4603	WAVES 1 1421	AIR T 21.0	VIS 7
CONS. NO 064	MONTH 7	MXSAMPD 45	WAVES 2 2322	WET B 18.5	STN
LAT 39-210N	DAY 04	NO.DPTH 23	WND-DIR 140	WW-CODE 01	
LON 39-568W	HR 04.6	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 112	C/I 1810	W-TRNSP	BARO 1021.1	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIG	PH
046	0000	214	36425		2549	15275						
046	0048	1768	36317	586	2638	15179					003	
046	0096	1676	36343	502	2662	15160					004	
046	0145	1598	36208	508	2670	15143					005	
046	0194	1528	36111	508	2678	15128					005	
046	0243	1470	36036	523	2685	15117					004	
046	0292	1449	36035	533	2690	15118					004	
046	0391	1452	36064	540	2691	15136					004	
046	0488	1382	35894	528	2693	15127					005	
046	0587	1302	35751	505	2699	15115					006	
046	0686	1104	35431	538	2712	15059					011	
046	0784	0948	35297	411	2729	15018					013	
046	0883	0788	35211	394	2748	14973					015	
046	0982	0704	35206	427	2760	14957					014	
046	1179	0546	35115	466	2773	14926					015	
062	1663	0421	35015	596	2780	14954					014	
062	2132	0364	34967	611	2782	15009					015	
062	2620	0326	34958	610	2785	15077					018	
062	3094	0293	34950	604	2787	15144					023	
062	3570	0255	34927	609	2789	15211					027	
062	4045	0233	34906	609	2789	15285					030	
062	4335	0230	34908	609	2789	15335					031	
062	4530	0228	34904	613	2789	15369					031	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2140	36425		2549	15275	0000	00000	2504
0010	2060 D	3641 C		2570	15256	0024	00001	2307
0020	1986 H	3640 F		2589	15237	0047	00005	2131
*0030	1918 I	3639 H		2605	15220	0067	00010	1976
0050	1761	36318		2639	15178	0104	00025	1659
0075	1698 E	3633 D		2656	15163	0144	00050	1511
0100	1669	36334		2663	15159	0181	00083	1453
0125	1628	3627 C		2668	15150	0217	00125	1415
0150	1590	36197		2671	15141	0253	00175	1393
0175	1554	36145		2675	15134	0287	00233	1359
0200	1520	36099		2679	15126	0321	00298	1326
0225	1488	36058		2683	15120	0354	00370	1297
0250	1465	36033		2686	15117	0387	00449	1274

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1450	36040		2690	15120	0450	00629	1250
0400	1447	36052		2692	15136	0577	01086	1267
0500	1376	3588 B		2694	15127	0705	01678	1271
0600	1278 B	3571 B		2700	15109	0831	02390	1226
0700	1081	35405		2714	15053	0949	03171	1095
0800	0920	35279		2732	15010	1051	03954	0925
1000	0688	35199		2761	14954	1210	05399	0647
1200	0536	35108		2774	14925	1328	06725	0520
1500	0438 F	3504 B		2779	14934	1479	08812	0472
2000	0376	34976		2781	14992	1719	13153	0474
2500	0334	34958		2784	15060	1959	18713	0466
3000	0300	34952		2787	15131	2194	25371	0453
3500	0260	34931		2789	15201	2420	32995	0435
4000	0234	34907		2789	15278	2643	41647	0434
4500	0228	34904		2789	15364	2869	51635	0447

C-REF-NO 009	YR 1964	DEPTH 4450	WAVES 1 1221	AIR T 22.5	VIS 7
CONS. NO 065	MONTH 7	MXSAMPD 46	WAVES 2 1022	WET B 20.9	STN
LAT 38-439N	DAY 04	NO.DPTH 24	WND-DIR 120	WW-CODE 01	
LON 39-520W	HR 11.9	W-COLOR	WND-SPD 05	CLD-TPE 1	
MARSD SQ 112	C/I 1810	W-TRNSP	BARO 1023.6	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
119	0000	205	36269		2561	15250						
119	0049	1735	36348	567	2648	15170					003	
119	0098	1643	36288	500	2665	15150					005	
119	0147	1544	36105	501	2674	15125					006	
119	0197	1481	36017	521	2681	15113					005	
119	0246	1440	35964	520	2686	15107					004	
119	0295	1431	36001	526	2691	15113					004	
119	0394	1431	35997	535	2691	15129					004	
119	0494	1367	35855	518	2693	15123					005	
119	0590	1214	35582	441	2703	15084					008	
119	0686	1035	35329	380	2717	15034					012	
119	0782	0833	35189	398	2739	14973					014	
119	0878	0673	35093	454	2755	14926					015	
119	0976	0654	35187	482	2765	14936					014	
119	1174	0517	35087	547	2775	14913						
135	1615	0398	35002	617	2781	14936						
135	2094	0363	34976	621	2783	15003						
135	2590	0329	34978	620	2786	15073						
135	3079	0288	34924	618	2786	15139						
135	3569	0249	34912	618	2788	15208						
135	3962	0230	34881	616	2787	15269						
135	4163	0226	34902	616	2789	15303						
135	4366	0226	34900	617	2789	15339					032	
135	4574	0226		618							032	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2050	36269		2561	15250	0000	00000	2383
0010	1985 D	36295		2581	15234	0023	00001	2202
0020	1924 G	36316		2598	15219	0044	00004	2040
*0030	1868 I	36331		2614	15205	0064	00009	1895
0050	1732	36348		2649	15169	0099	00023	1569
0075	1673 E	36332		2662	15156	0137	00048	1454
0100	1639	36281		2666	15149	0173	00080	1423
0125	1587	3619 C		2671	15136	0209	00121	1382
0150	1539	36098		2675	15124	0243	00169	1354
0175	1505	36047		2679	15117	0277	00226	1325
0200	1478	36012		2682	15112	0310	00289	1300
0225	1454	35979		2684	15108	0343	00360	1283
0250	1439	35966		2687	15107	0375	00439	1267

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1431	36004		2691	15114	0438	00617	1239
0400	1429	35992		2691	15129	0565	01074	1273
0500	1359	35840		2694	15121	0693	01667	1267
0600	1196	35553		2704	15079	0816	02363	1180
0700	1005	35304		2720	15025	0928	03107	1033
0800	0796 B	35162		2743	14962	1021	03819	0808
1000	0640 B	3518 C		2767	14934	1162	05102	0586
1200	0505	35079		2775	14912	1272	06339	0499
1500	0413 C	3501 B		2780	14923	1418	08346	0454
2000	0366 B	34977		2782	14988	1650	12541	0460
2500	0335	34979		2786	15060	1882	17939	0453
3000	0295	34933		2786	15129	2115	24562	0459
3500	0254	34913		2788	15198	2344	32257	0437
4000	0229	34885		2788	15275	2569	41002	0441
4500	0226							

C-REF-NO 009	YR 1964	DEPTH 4319	WAVES 1 1021	AIR T 22.0	VIS 8
CONS. NO 066	MONTH 7	MXSAMPD 44	WAVES 2 1023	WET B 20.0	STN
LAT 38-005N	DAY 04	NO.DPTH 23	WND-DIR 110	WW-CODE 03	
LON 40-017W	HR 19.6	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1025.1	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
196	0000	227	36305		2503	15307					
196	0048	1756	36408	505	2648	15177				005	
196	0095	1704	36416	504	2661	15169				005	
196	0142	1618	36271	484	2670	15149				007	
196	0189	1520	36031	503	2674	15124				006	
196	0237	1452	35945	494	2682	15109				006	
196	0284	1384	35827	497	2688	15093				006	
196	0382	1297	35689	481	2695	15079				007	
196	0479	1129	35454	373	2709	15034				012	
196	0577	0925	35223	353	2727	14974				015	
196	0664	0760	35136	412	2746	14925				016	
196	0759	0670	35146	457	2760	14906				015	
196	0852	0631	35174	492	2767	14906				015	
196	0950	0528	35068	541	2772	14880				015	
196	1152	0455	35024	583	2777	14883				014	
212	1554	0403	34986	612	2779	14928				014	
212	2049	0358	34965	614	2782	14993				017	
212	2549	0319	34954	616	2785	15061				020	
212	3045	0282	34934	614	2787	15131				024	
212	3637	0245	34913	614	2789	15218				029	
212	4035	0229	34904	611	2789	15281				033	
212	4239	0229	34896	612	2789	15317				034	
212	4434	0228	34911	615	2790	15352				034	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2270	36305		2503	15307	0000	00000	2939
0010	2162 H	36339		2536	15282	0028	00001	2628
0020	2063 I	36368		2565	15258	0053	00005	2353
*0030	1974 I	3639 B		2591	15235	0076	00011	2114
0050	1750 B	36411		2649	15175	0113	00025	1564
0075	1701 I	36428		2662	15165	0151	00050	1449
0100	1696	36406		2662	15168	0187	00083	1461
0125	1652	36338		2667	15158	0223	00124	1419
0150	1601	3623 B		2671	15145	0259	00174	1393
0175	1548	3610 C		2673	15131	0294	00233	1380
0200	1503	3601 B		2676	15120	0328	00299	1359
0225	1468	3596 B		2680	15112	0362	00373	1324
0250	1432	35912		2684	15105	0395	00453	1293
0300	1370 B	3580 B		2689	15091	0459	00635	1260

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1270	35649		2697	15072	0584	01080	1201
0500	1086	3540 B		2713	15022	0698	01604	1063
0600	0877	35190		2732	14959	0796	02154	0879
0700	0717	35132		2752	14914	0875	02680	0692
0800	0653 B	3517 B		2763	14906	0940	03178	0590
1000	0500 C	3505 B		2773	14876	1050	04184	0493
1200	0445	35017		2777	14887	1147	05279	0464
1500	0406	34989		2779	14920	1288	07239	0462
2000	0362	34966		2782	14986	1523	11479	0462
2500	0323	34955		2785	15055	1755	16880	0452
3000	0285	34936		2787	15125	1984	23361	0442
3500	0253	34917		2788	15198	2207	30877	0432
4000	0230	34905		2789	15276	2428	39442	0428

C-REF-NO 009	YR 1964	DEPTH 4133	WAVES 1 1221	AIR T 22.0	VIS 7
CONS. NO 067	MONTH 7	MXSAMPD 42	WAVES 2 1214	WET B 20.0	STN
LAT 37-200N	DAY 05	NO.DPTH 23	WND-DIR 120	WW-CODE 01	
LON 40-025W	HR 02.6	W-COLOR	WND-SPD 06	CLD-TPE 8	
MARSD SQ 113	C/I 1810	W-TRNSP	BARO 1026.1	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
026	0000	225	36379		2514	15303					
026	0047	1721	36304	518	2648	15165				002	
026	0093	1690	36384	499	2662	15164				003	
026	0140	1600	36215	504	2670	15143				004	
026	0189	1502	36031	484	2678	15118				005	
026	0236	1417	35860	480	2683	15097				005	
026	0283	1391	35838	502	2687	15096				005	
026	0379	1304	35722	490	2696	15081				005	
026	0473	1096	35423	380	2713	15021				006	
026	0569	0890	35209	377	2732	14960				011	
026	0661	0747	35112	417	2746	14919				015	
026	0757	0607	35037	479	2759	14879				015	
026	0850	0608	35154	506	2768	14896				014	
026	0950	0515	35015	547	2769	14874				014	
026	1150	0459	35040	586	2778	14884					
041	1450	0397	34978	613	2779	14908					
041	1941	0362	34962	618	2782	14976					
041	2443	0325	34960	620	2785	15046					
041	2945	0282	34936	616	2787	15114					
041	3447	0248	34908	614	2788	15186					
041	3850	0231	34906	613	2789	15250					
041	4058	0229	34902	615	2789	15285				032	
041	4247	0226	34880	616	2788	15317				033	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2250	36379		2514	15303	0000	00000	2831
0010	2138 I	3638 D		2546	15276	0027	00001	2535
0020	2037 I	3638 H		2574	15251	0051	00005	2275
*0030	1945 I	3638 I		2598	15227	0073	00010	2050
0050	1713 C	3631 B		2651	15163	0109	00025	1552
0075	1677 I	3636 E		2663	15157	0147	00049	1444
0100	1679	3637 B		2663	15162	0183	00082	1450
0125	1632	3628 C		2668	15151	0219	00123	1415
0150	1580	36178		2672	15138	0255	00173	1384
0175	1530	36084		2676	15125	0289	00230	1351
0200	1479	3598 B		2679	15112	0323	00295	1324
0225	1434	3589 B		2682	15101	0356	00367	1303
0250	1407	3585 B		2684	15095	0389	00447	1288
0300	1382	35828		2688	15095	0453	00629	1265

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1263 B	3566 C		2700	15070	0576	01070	1178
0500	1035	35352		2719	15003	0687	01575	1006
0600	0838	35169		2737	14945	0779	02096	0833
0700	0681 C	3507 B		2752	14899	0856	02605	0686
0800	0604 E	3509 F		2764	14886	0920	03094	0573
1000	0492 C	3501 E		2771	14872	1030	04106	0513
1200	0447	3503 B		2778	14887	1128	05211	0455
1500	0392	34974		2780	14914	1266	07135	0454
2000	0358	34962		2782	14984	1498	11330	0460
2500	0320	34958		2785	15054	1729	16680	0446
3000	0278	34932		2787	15122	1953	23052	0433
3500	0245	34907		2788	15194	2174	30453	0427
4000	0229	34904		2789	15276	2393	38969	0428

C-REF-NO 009	YR 1964	DEPTH 3988	WAVES 1 1221	AIR T 22.5	VIS 8
CONS. NO 068	MONTH 7	MXSAMPD 41	WAVES 2 1421	WET B 19.5	STN
LAT 36-427N	DAY 05	NO.DPTH 24	WND-DIR 120	WW-CODE 01	
LON 39-578W	HR 09.6	W-COLOR	WND-SPD 05	CLD-TPE 8	
MARSD SQ 112	C/I 1810	W-TRNSP	BARO 1028.1	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
096	0000	223	36291		2513	15297						
096	0049	1734	36250	542	2641	15169					002	
096	0098	1684	36376	521	2663	15163					005	
096	0147	1599	36194	502	2669	15144					005	
096	0196	1508	36021	485	2676	15121					006	
096	0245	1442	35914	487	2682	15107					005	
096	0294	1371	35831	468	2691	15091					006	
096	0393	1240	35598	482	2699	15060					008	
096	0491	1106	35439	363	2712	15028					013	
096	0588	0912	35210	350	2728	14971					016	
096	0685	0736	35070	405	2744	14918					016	
096	0783	0604	35058	481	2761	14882					016	
096	0882	0532	35030	522	2768	14869					015	
096	0980	0539	35096	539	2773	14889					014	
110	1096	0470	35030	570	2775	14880					014	
096	1180	0451	35024	590	2777	14886					014	
110	1591	0409	35011	601	2781	14937					015	
110	2093	0352	34976	619	2784	14998					016	
110	2597	0313	34958	613	2786	15067					021	
110	3098	0274	34937	612	2788	15137					027	
110	3500	0244	34919	609	2789	15194					031	
110	3699	0235	34904	610	2789	15225					032	
110	3898	0226	34939	611	2792	15256					033	
110	4090	0224	34944	611	2793	15289					034	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2230	36291		2513	15297	0000	00000	2841
0010	2128 H	3631 E		2543	15273	0027	00001	2564
0020	2035 I	3632 I		2569	15250	0052	00005	2320
*0030	1951 I	3632 I		2592	15228	0074	00011	2106
0050	1731	36253		2642	15168	0112	00026	1636
0075	1682 I	3633 G		2659	15158	0151	00051	1479
0100	1681	36371		2663	15163	0188	00084	1452
0125	1640	3629 D		2667	15154	0224	00125	1424
0150	1593	36182		2669	15142	0260	00176	1410
0175	1546	36091		2673	15130	0295	00234	1381
0200	1502	36011		2676	15120	0329	00301	1353
0225	1468	35952		2679	15112	0363	00375	1330
0250	1435	35905		2683	15105	0396	00455	1303

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1363	35817		2691	15089	0460	00636	1235
0400	1232	35587		2700	15059	0582	01071	1171
0500	1089	35417		2714	15023	0694	01587	1054
0600	0889	35187		2730	14964	0793	02141	0901
0700	0712	35064		2747	14911	0876	02690	0735
0800	0587	35050		2763	14878	0942	03199	0581
1000	0528 B	3509 B		2773	14888	1051	04204	0500
1200	0448	35023		2777	14888	1149	05306	0463
1500	0415 B	35013		2780	14924	1289	07251	0456
2000	0362	34983		2783	14986	1519	11406	0450
2500	0320	34961		2786	15054	1747	16691	0443
3000	0282	34941		2788	15123	1971	23042	0433
3500	0244	34919		2789	15194	2188	30348	0417
4000	0225	3493 B		2792	15274	2397	38473	0399

C-REF-NO 009 YR 1964 DEPTH 3895 WAVES 1 0821 AIR T 24.0 VIS 8
 CONS. NO 069 MONTH 7 MXSAMPD 40 WAVES 2 1421 WET B 22.0 STN
 LAT 35-581N DAY 05 NO.DPTH 23 WND-DIR 080 WW-CODE 01
 LON 40-003W HR 16.8 W-COLOR WND-SPD 07 CLD-TPE 8
 MARSD SQ 113 C/I 1810 W-TRNSP BARO 1029.1 CLD-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
168	0000	229	36500		2512	15314						
168	0048	1920	36306	525	2598	15223					002	
168	0095	1819	36528	498	2641	15204					002	
168	0143	1768	36499	493	2652	15197					002	
168	0191	1751	36489	500	2655	15200					003	
168	0239	1739	36483	506	2657	15204					004	
168	0288	1719	36430	505	2658	15206					005	
168	0384	1702	36422	515	2662	15216					004	
168	0481	1550	36103	432	2673	15182					004	
168	0579	1421	35886	474	2684	15155					006	
168	0675	1277	35678	431	2698	15120					008	
168	0777	1064	35414	386	2718	15060					013	
168	0869	0888	35272	401	2737	15009					014	
168	0970	0734	35193	497	2754	14966					015	
168	1169	0570	35114	526	2770	14934						
185	1623	0416	35003	600	2779	14945						
185	2099	0371	34980	609	2782	15007						
185	2566	0326	34964	624	2785	15067						
185	3030	0292	34951	601	2787	15133						
185	3310	0270	34912	604	2786	15172						
185	3597	0250	34906	603	2788	15213						
185	3793	0242	34936	604	2791	15245					035	
185	4000	0229	34921	602	2791	15275					036	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2290	36500		2512	15314	0000	00000	2853
0010	2207 D	3648 G		2534	15295	0028	00001	2649
0020	2131 F	3646 I		2553	15277	0053	00005	2466
*0030	2062 I	3644 I		2571	15260	0077	00011	2302
0050	1913	3631 B		2601	15221	0121	00029	2024
0075	1843 D	3642 I		2627	15207	0169	00059	1785
0100	1812	3653 B		2643	15203	0212	00098	1641
0125	1782	3652 D		2650	15199	0253	00145	1584
0150	1764	36497		2652	15197	0292	00201	1571
0175	1754	36491		2654	15198	0332	00266	1561
0200	1749	36489		2656	15201	0371	00342	1557
0225	1743	36487		2657	15203	0410	00428	1553
0250	1735	36472		2658	15205	0449	00523	1554
0300	1720 B	3643 C		2658	15208	0528	00745	1563

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1681 B	3638 C		2663	15212	0685	01309	1548
0500	1525	36057		2675	15177	0837	02008	1460
0600	1393	35842		2687	15148	0979	02811	1363
0700	1227 B	3561 B		2703	15107	1110	03680	1222
0800	1018	35371		2723	15047	1224	04553	1028
1000	0701 B	35177		2758	14958	1397	06121	0684
1200	0553	35104		2771	14932	1522	07519	0547
1500	0437 C	35024		2779	14934	1678	09674	0479
2000	0375 B	34981		2782	14992	1919	14022	0471
2500	0332	34966		2785	15059	2155	19506	0458
3000	0294	34953		2787	15129	2385	26036	0444
3500	0256	34903		2787	15199	2613	33711	0448
4000	0229	34921		2791	15276	2835	42288	0415

C-REF-NO 009	YR 1964	DEPTH 3305	WAVES 1 0621	AIR T 22.0	VIS 8
CONS. NO 070	MONTH 7	MXSAMPD 34	WAVES 2 00X0	WET B 20.0	STN
LAT 35-590N	DAY 06	NO.DPTH 21	WND-DIR 060	WW-CODE 01	
LON 38-3QOW	HR 02.3	W-COLOR	WND-SPD 06	CLD-TPE 8	
MARSD SQ 112	C/I 1810	W-TRNSP	BARO 1031.1	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
023	0000	224	36436		2521	15301					
023	0049	1779	36404	537	2642	15184				014	
023	0098	1700	36414	504	2662	15169				012	
023	0147	1656	36331	508	2666	15163				009	
023	0195	1580	36219	510	2675	15146				014	
023	0244	1518	36083	513	2678	15133				004	
023	0293	1484	36068	535	2685	15130				004	
023	0390	1439	36018	543	2691	15131				004	
023	0488	1429	36000	545	2691	15144				004	
023	0586	1351	35838	514	2695	15132				005	
023	0682	1208	35614	510	2707	15097				007	
023	0777	0997	35349	393	2725	15035				012	
023	0874	0825	35199	412	2741	14985				014	
023	0971	0689	35212	455	2762	14949				015	
023	1169	0654	35294	453	2773	14970				014	
036	1527	0486	35129	565	2781	14960				015	
036	2000	0371	34998	606	2784	14990				016	
036	2509	0326	34974	601	2786	15058				023	
036	3003	0284	34946	603	2788	15125				027	
036	3205	0268	34937	601	2789	15153				030	
036	3405	0252	34926	607	2789	15181				031	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2240	36436		2521	15301	0000	00000	2763
0010	2141 F	3644 B		2549	15277	0026	00001	2502
0020	2050 I	3644 C		2574	15255	0050	00005	2271
*0030	1968 I	3643 D		2596	15234	0072	00010	2069
0050	1775	36404		2643	15183	0110	00025	1629
0075	1711 G	3641 B		2659	15168	0149	00050	1483
0100	1698	36412		2662	15168	0186	00083	1462
0125	1676 B	36376		2665	15165	0222	00126	1445
0150	1652	36325		2666	15162	0259	00177	1436
0175	1613	36269		2671	15153	0294	00236	1398
0200	1573	36203		2675	15144	0329	00303	1366
0225	1539	3613 B		2677	15137	0364	00378	1354
0250	1513	36078		2679	15132	0398	00461	1342
0300	1480	36064		2685	15130	0464	00649	1297
0400	1439	36019		2691	15133	0594	01114	1273
0500	1423	35986		2692	15144	0723	01714	1294

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA--D	POT.EN	SVA
0600	1334	35809		2697	15129	0853	02444	1267
0700	1169 B	3556 B		2710	15086	0975	03256	1147
0800	0953	35301		2729	15022	1081	04075	0965
1000	0675 D	3523 B		2765	14949	1241	05513	0608
1200	0641 B	3529 B		2775	14969	1357	06826	0542
1500	0500 B	3515 B		2781	14961	1512	08965	0476
2000	0371	34998		2784	14990	1748	13203	0452
2500	0326	34974		2786	15057	1976	18496	0444
3000	0284	34946		2788	15125	2200	24854	0433

C-REF-NO 009	YR 1964	DEPTH 3058	WAVES 1 0821	AIR T 23.0	VIS 8
CONS. NO 071	MONTH 7	MXSAMPD 32	WAVES 2 00X0	WET B 20.0	STN
LAT 35-591N	DAY 06	NO.DPTH 21	WND-DIR 080	WW-CODE 03	
LON 37-015W	HR 10.7	W-COLOR	WND-SPD 06	CLD-TPE 8	
MARSD SQ 112	C/I 1810	W-TRNSP	BARO 1032.4	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
107	0000	221	36359		2524	15293					
107	0049	1734	36269	556	2642	15169				003	
107	0098	1601	36199	520	2668	15136				006	
107	0148	1566	36158	512	2673	15133				007	
107	0197	1518	36069	497	2677	15125				006	
107	0246	1486	36049	530	2683	15123				004	
107	0295	1418	35917	485	2687	15107				005	
107	0394	1304	35732	457	2697	15084				007	
107	0492	1158	35524	407	2709	15048				011	
107	0591	0999	35377	393	2727	15006				013	
107	0685	0862	35274	405	2741	14969				014	
107	0786	0866	35478	437	2757	14990				013	
107	0880	0782	35394	457	2763	14973				014	
107	0979	0726	35382	478	2770	14967				014	
107	1181	0608	35279	524	2778	14953					
116	1553	0450	35070	585	2781	14949					
116	2053	0359	34991	606	2784	14994					
116	2557	0314	34958	614	2786	15061					
116	2758	0298	34950	614	2787	15088					
116	2957	0289	34943	607	2787	15119				027	
116	3155	0265	34932	611	2788	15143				028	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2210	36359		2524	15293	0000	00000	2738
0010	2103 D	36338		2552	15266	0026	00001	2475
0020	2006 G	36319		2577	15242	0050	00005	2243
*0030	1918 I	36300		2599	15219	0072	00010	2040
0050	1729	36267		2643	15168	0108	00025	1621
0075	1636 E	36229		2663	15143	0147	00050	1446
0100	1599	36198		2669	15136	0183	00082	1395
0125	1577 C	36178		2672	15133	0218	00122	1369
0150	1564	36154		2673	15133	0252	00170	1366
0175	1539	3611 B		2675	15129	0286	00228	1355
0200	1516	36068		2678	15125	0320	00293	1341
0225	1501	3606 C		2680	15124	0354	00366	1322
0250	1481	36040		2683	15122	0387	00447	1302
0300	1412	35907		2688	15106	0452	00630	1270
0400	1296	35719		2698	15082	0576	01076	1200
0500	1145	35510		2711	15044	0692	01608	1089

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0983	3536 B		2728	15001	0794	02181	0931
0700	0861 C	3530 E		2744	14971	0881	02758	0789
0800	0855 B	3547 C		2758	14988	0955	03327	0677
1000	0713	35374		2771	14966	1080	04472	0558
1200	0598	35267		2779	14952	1187	05672	0493
1500	0468	35097		2781	14947	1333	07700	0468
2000	0364	34993		2784	14987	1565	11878	0446
2500	0318	34960		2786	15053	1791	17124	0441
3000	0281	34940		2788	15123	2014	23463	0433

C-REF-NO 009 YR 1964 DEPTH 2520 WAVES 1 0821 AIR T 22.5 VIS 8
 CONS. NO 072 MONTH 7 MXSAMPD 26 WAVES 2 00X0 WET B 18.5 STN
 LAT 36-000N DAY 06 NO.DPTH 21 WND-DIR 080 WW-CODE 03
 LON 35-323W HR 19.2 W-COLOR WND-SPD 06 CLD-TPE 8
 MARSD SQ 112 C/I 1810 W-TRNSP BARO 1032.3 CLD-AMT 6 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
192	0000	234	36506		2498	15327					
192	0010	2254	36503	528	2522	15307					
196	0050	1748	36339	540	2644	15174				003	
196	0099	1701	36423	506	2662	15169				006	
201	0148	1646	36303	499	2666	15159				006	
201	0198	1602	36241	511	2671	15153				007	
201	0247	1538	36098	483	2675	15140				005	
201	0296	1482	36051	502	2684	15130				005	
201	0395	1384	35883	502	2692	15112				006	
201	0494	1196	35551	419	2704	15061				010	
208	0595	1014	35352	382	2722	15011				013	
208	0693	0890	35306	402	2739	14981				014	
208	0792	0866	35460	431	2755	14991				013	
208	0892	0813	35471	449	2764	14987				014	
208	0980	0753	35429	469	2770	14979				014	
216	1190	0658	35365	510	2778	14976				014	
237	1517	0465	35124	581	2784	14949				015	
247	1978	0381	35056	601	2787	14991				018	
247	2181	0355	35008	610	2786	15014				019	
247	2383	0337		610						021	
247	2591	0319	34979	608	2787	15069				022	

FMULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2340	36506		2498	15327	0000	00000	2988
0010	2254	36503		2522	15307	0029	00001	2757
0020	2120 I	3646 E		2557	15274	0055	00005	2431
0030	1991 I	3642 F		2589	15240	0078	00011	2133
0050	1748	36339		2644	15174	0116	00026	1613
0075	1685 I	3638 G		2662	15160	0154	00051	1451
0100	1700	36421		2662	15169	0191	00083	1459
0125	1672	3637 D		2665	15164	0227	00126	1442
0150	1644	36301		2666	15159	0264	00177	1437
0175	1623	3627 B		2669	15156	0300	00237	1419
0200	1600	36235		2672	15153	0335	00305	1402
0225	1568	3616 C		2673	15146	0370	00382	1393
0250	1534	36094		2676	15139	0405	00467	1377
0300	1479	36047		2684	15129	0473	00658	1308

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1375	35867		2693	15110	0602	01121	1253
0500	1184	35535		2705	15058	0723	01678	1145
0600	1006	35346		2723	15009	0831	02281	0982
0700	0887	3532 B		2741	14982	0922	02887	0823
0800	0863	35465		2756	14991	0999	03475	0694
1000	0743	35423		2771	14978	1126	04645	0568
1200	0652	35358		2779	14975	1235	05872	0507
1500	0474	35137		2783	14951	1380	07879	0448
2000	0378	35051		2787	14994	1602	11858	0423
2500	0326	34986		2787	15057	1820	16938	0434

C-REF-NO 009 YR 1964 DEPTH 2926 WAVES 1 0521 AIR T 17.5 VIS 5
 CONS. NO 073 MONTH 7 MXSAMPD 31 WAVES 2 0621 WET B 16.5 STN
 LAT 37-015N DAY 07 NO.DPTH 21 WND-DIR 050 WW-CODE 60
 LON 35-326W HR 07.0 W-COLOR WND-SPD 06 CLD-TPE 7
 MARSD SQ 112 C/I 1810 W-TRNSP BARO 1031.1 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	P04 -P-	NO2	NO3	SIO	PH
070	0000	220	36293		2522	15289					
070	0048	1726	36162	579	2636	15165				002	
070	0097	1628	36255	508	2666	15145				004	
070	0146	1564	36151	520	2673	15132				004	
070	0195	1526	36082	525	2677	15127				005	
070	0243	1486	36029	514	2681	15122				004	
070	0292	1434	35939	496	2686	15112				004	
070	0390	1332	35768	468	2694	15093				006	
070	0489	1202	35603	456	2707	15063				008	
070	0585	1102	35520	442	2720	15043				009	
070	0682	0986	35566	407	2744	15018				012	
070	0781	0929	35439	418	2743	15012				013	
070	0880	0890	35503	430	2755	15015				013	
070	0982	0813	35442	453	2762	15002				014	
070	1180	0687	35339	500	2772	14985					
083	1548	0486	35112	575	2780	14963					
083	2044	0368	35004	611	2784	14997					
083	2449	0330	34980	611	2786	15049					
083	2648	0312	34962	608	2787	15076					
083	2854	0290	34950	609	2788	15102				025	
083	3054	0275	34939	614	2788	15130				026	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2200	36293		2522	15289	0000	00000	2759
0010	2097 F	3628 E		2549	15264	0026	00001	2500
0020	2002 I	3627 H		2574	15240	0050	00005	2271
*0030	1917 I	3625 I		2595	15218	0072	00010	2071
0050	1718 B	36165		2638	15163	0110	00026	1669
0075	1646 G	3621 F		2659	15146	0150	00051	1481
0100	1623	36251		2667	15144	0186	00083	1410
0125	1588	3621 C		2672	15137	0221	00124	1373
0150	1560	36144		2674	15132	0256	00172	1366
0175	1540	36107		2675	15129	0290	00230	1357
0200	1522	36077		2677	15127	0324	00295	1348
0225	1502	36050		2679	15124	0358	00369	1331
0250	1479	36017		2682	15121	0391	00450	1314
0300	1426	35925		2686	15111	0457	00635	1286
0400	1319	35749		2695	15090	0583	01089	1224
0500	1190	35588		2708	15061	0701	01632	1117

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	1083	3553 B		2724	15039	0808	02229	0985
0700	0973	3554 C		2744	15016	0898	02828	0803
0800	0922	3545 C		2745	15013	0979	03456	0805
1000	0801	35432		2763	15000	1127	04807	0653
1200	0674	35326		2773	14983	1250	06196	0565
1500	0508	35139		2780	14965	1411	08420	0494
2000	0373	35007		2784	14991	1651	12711	0448
2500	0326	34975		2786	15056	1877	17972	0441
3000	0279	34941		2788	15122	2100	24282	0429

C-REF-NO 009	YR 1964	DEPTH 3338	WAVES 1 0622	AIR T 22.0	VIS 8
CONS. NO 074	MONTH 7	MXSAMPD 35	WAVES 2 0422	WET B 17.0	STN
LAT 38-005N	DAY 07	NO.DPTH 21	WND-DIR 060	WW-CODE 01	
LON 35-317W	HR 16.1	W-COLOR	WND-SPD 06	CLD-TPE 8	
MARSD SQ 112	C/I 1810	W-TRNSP	BARO 1032.3	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
161	0000	221	36391		2526	15293					
161	0049	1865	36194	575	2604	15206				002	
161	0098	1617	36229	512	2667	15141				004	
161	0147	1548	36075	527	2671	15126				004	
161	0196	1514	36064	523	2678	15124				005	
161	0245	1460	35974	516	2683	15113				004	
161	0295	1412	35918	510	2689	15105				004	
161	0393	1276	35693	464	2700	15074				006	
161	0482	1151	35546	438	2712	15044				008	
161	0589	1052	35480	430	2725	15026				010	
161	0687	0975	35437	423	2735	15013				012	
161	0787	0932	35506	429	2748	15015				012	
161	0883	0830	35389	443	2755	14991				013	
161	0986	0735	35291	471	2762	14971				014	
161	1182	0591	35188	531	2773	14945				013	
172	1570	0464	35080	585	2780	14957				014	
172	2059	0356	34960	624	2782	14993				016	
172	2554	0314	34957	621	2786	15060				020	
172	3050	0279	34943	616	2788	15131				026	
172	3250	0271	34942	614	2789	15162				027	
172	3458	0263	34929	617	2788	15195				028	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2210	36391		2526	15293	0000	00000	2715
0010	2126 B	3636 E		2548	15272	0026	00001	2514
0020	2047 C	3634 H		2567	15253	0051	00005	2334
*0030	1974 C	3631 I		2585	15235	0073	00011	2172
0050	1859	36194		2606	15204	0115	00028	1979
0075	1716 B	3621 F		2642	15167	0161	00056	1642
0100	1612	36223		2668	15140	0199	00090	1406
0125	1566 C	3615 E		2673	15129	0234	00131	1367
0150	1546	36073		2671	15126	0269	00180	1385
0175	1528	3607 C		2675	15124	0303	00237	1361
0200	1510	36057		2678	15123	0337	00303	1335
0225	1483	3601 B		2681	15118	0371	00376	1318
0250	1455	35968		2683	15113	0404	00456	1300
0300	1406	35908		2689	15104	0468	00638	1256
0400	1265	35679		2701	15071	0591	01076	1170
0500	1132	35530		2715	15040	0703	01591	1050

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	1042	35472		2727	15024	0804	02161	0954
0700	0970	3545 B		2737	15014	0896	02774	0867
0800	0920	3550 B		2749	15012	0979	03409	0767
1000	0723	35281		2763	14968	1121	04715	0641
1200	0582	35181		2774	14945	1240	06050	0533
1500	0478 B	35094		2780	14951	1395	08190	0484
2000	0366	34971		2782	14988	1635	12523	0464
2500	0317	34955		2785	15052	1866	17879	0444
3000	0282	34944		2788	15124	2090	24218	0431

C-REF-NO 009 YR 1964 DEPTH 3950 WAVES 1 04X0 AIR T 19.9 VIS 8
 CONS. NO 075 MONTH 7 MXSAMPD 41 WAVES 2 00X0 WET B 15.6 STN
 LAT 38-580N DAY 07 NO.DPTH 23 WND-DIR 040 WW-CODE 03
 LON 35-339W HR 23.2 W-COLOR WND-SPD 04 CLD-TPE 3
 MARSD SQ 112 C/I 1810 W-TRNSP BARO 1032.9 CLD-AMT 5 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	S10	PH
232	0000	215	36348		2540	15277						
232	0050	1770	36230	595	2631	15179					002	
232	0100	1559	36139	524	2673	15123					005	
232	0150	1522	36103	526	2679	15119					005	
232	0200	1490	36061	526	2683	15117					005	
232	0249	1454	36001	520	2686	15112					004	
232	0299	1423	35946	517	2689	15110					005	
232	0398	1378	35877	517	2693	15111					006	
232	0498	1262	35679	472	2701	15086					007	
232	0598	1166	35576	454	2712	15069					008	
232	0697	1062	35491	454	2724	15047					010	
232	0796	0952	35427	422	2739	15023					012	
232	0895	0859	35458	433	2756	15005					014	
232	0997	0759	35321	458	2761	14982					014	
232	1195	0632	35281	516	2775	14965						
*244	1474	0430	35012	605	2779	14926						
*244	1959	0384	34983	618	2781	14989						
*244	2460	0333	34957	624	2784	15052						
*244	2975	0292	34958	617	2788	15124						
*244	3477	0253	34927	615	2789	15194						
*244	3678	0244	34929	615	2790	15225						
*244	3881	0239	34920	614	2790	15259					030	
*244	4080	0239	34919	614	2790	15294					032	

*MULTIPLE CAST CONTINUED NEXT DAY

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2150	36348		2540	15277	0000	00000	2586
0010	2060	36320		2563	15255	0025	00001	2376
0020	1977	36294		2583	15234	0048	00005	2188
*0030	1901	36269		2601	15214	0069	00010	2021
0050	1770	36230		2631	15179	0107	00025	1743
0075	1643	36179		2657	15145	0148	00051	1498
0100	1559	36139		2673	15123	0184	00083	1351
0125	1529 D	36118		2679	15117	0217	00122	1310
0150	1522	36103		2679	15119	0250	00168	1313
0175	1506	36084		2681	15118	0283	00223	1300
0200	1490	36061		2683	15117	0316	00286	1291
0225	1472	36031		2685	15114	0348	00357	1281

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1453	36000		2686	15112	0380	00435	1273
0300	1423	35945		2689	15110	0444	00616	1264
0400	1376	35873		2693	15110	0571	01071	1249
0500	1260	35676		2701	15086	0694	01639	1187
0600	1164	35574		2712	15068	0810	02290	1103
0700	1059	35488		2725	15046	0916	02996	0994
0800	0948	35429		2739	15022	1010	03717	0864
1000	0757	35320		2761	14982	1164	05130	0665
1200	0628	35276		2776	14964	1286	06488	0530
1500	0423 B	3500 B		2779	14927	1438	08601	0474
2000	0380	34980		2781	14994	1680	12963	0477
2500	0330	34957		2784	15058	1919	18498	0460
3000	0290	34956		2788	15127	2147	24975	0435
3500	0252	34927		2789	15198	2367	32355	0424
4000	0239	34921		2790	15280	2586	40878	0431

C-REF-NO 009	YR 1964	DEPTH 4136	WAVES 1 3521	AIR T 20.0	VIS 6
CONS. NO 076	MONTH 7	MXSAMPD 42	WAVES 2 00X0	WET B 18.0	STN
LAT 40-015N	DAY 08	NO.DPTH 23	WND-DIR 350	WW-CODE 60	
LON 35-300W	HR 06.9	W-COLOR	WND-SPD 07	CLD-TPE 7	
MARSD SQ 148	C/I 1810	W-TRNSP	BARO 1029.6	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
069	0000	205	36372		2569	15251					
069	0050	1724	36328	563	2649	15167				001	
069	0099	1622	36256	509	2668	15143				004	
069	0148	1528	36105	501	2678	15121				004	
069	0198	1448	35996	513	2687	15102				005	
069	0248	1428	36007	530	2692	15104				004	
069	0297	1400	35934	525	2693	15102				005	
069	0396	1311	35755	481	2697	15087				006	
069	0495	1206	35589	445	2705	15066				008	
069	0595	1086	35477	424	2719	15039				010	
069	0692	0938	35373	411	2737	15000				013	
069	0788	0821	35283	426	2748	14971				014	
069	0885	0748	35289	460	2760	14959				014	
069	0986	0706	35319	485	2768	14960				014	
069	1184	0536	35114	546	2774	14922				013	
084	1558	0407	34976	614	2778	14930				013	
084	2052	0362	34953	620	2781	14995				016	
084	2548	0330	34954	621	2784	15066				018	
084	3040	0286	34942	613	2787	15132				024	
084	3538	0251	34919	612	2789	15204				029	
084	3837	0240	34910	613	2789	15251				031	
084	4048	0236	34908	614	2789	15287				031	
084	4247	0235	34906	616	2789	15321				032	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2050	36372		2569	15251	0000	00000	2308
0010	1982 C	36369		2587	15234	0022	00001	2143
0020	1920 F	36365		2603	15218	0043	00004	1994
*0030	1861 H	3636 B		2617	15204	0063	00009	1861
0050	1724	36328		2649	15167	0097	00023	1565
0075	1658 D	36298		2663	15151	0135	00047	1445
0100	1620	36253		2668	15143	0171	00079	1401
0125	1571	3618 B		2674	15131	0206	00119	1355
0150	1524	36099		2678	15120	0239	00167	1320
0175	1480	36036		2683	15109	0272	00222	1280
0200	1447	35996		2687	15102	0304	00283	1247
0225	1434 B	3600 C		2690	15102	0335	00351	1225
0250	1427	36005		2692	15104	0366	00426	1215
0300	1398	35929		2693	15102	0427	00600	1224

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVa
0400	1307	35748		2698	15086	0550	01039	1201
0500	1201	35583		2706	15064	0668	01584	1141
0600	1078	35471		2720	15037	0777	02198	1019
0700	0927	35363		2738	14997	0872	02827	0855
0800	0810	35280		2750	14968	0953	03447	0743
1000	0695	3531 B		2769	14958	1086	04668	0577
1200	0527	35104		2775	14921	1196	05910	0511
1500	0416 B	3498 B		2778	14924	1347	08000	0480
2000	0363	34951		2781	14986	1590	12377	0475
2500	0333	34954		2784	15059	1830	17952	0468
3000	0290	34943		2787	15127	2063	24551	0444
3500	0253	34921		2789	15198	2286	32065	0431
4000	0237	34908		2789	15279	2509	40712	0437

C-REF-NO 009	YR 1964	DEPTH 4402	WAVES 1 0223	AIR T 22.0	VIS 7
CONS. NO 077	MONTH 7	MXSAMPD 45	WAVES 2 00X0	WET B 19.0	STN
LAT 41-042N	DAY 08	NO.DPTH 24	WND-DIR 020	WW-CODE 50	
LON 35-308W	HR 14.6	W-COLOR	WND-SPD 08	CLD-TPE 8	
MARSD SQ 148	C/I 1810	W-TRNSP	BARO 1028.6	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SID	PH
146	0000	204	36229		2561	15247					
146	0050	1590	36107	528	2664	15124				008	
146	0099	1483	36029	516	2682	15097				010	
146	0149	1419	35961	528	2691	15084				010	
146	0199	1408	35943	533	2692	15089				010	
146	0248	1380	35909	533	2695	15087				005	
146	0298	1354	35845	525	2695	15086				006	
146	0397	1264	35685	506	2701	15070				007	
146	0496	1186	35568	490	2708	15059				010	
146	0594	1049	35394	434	2719	15024				010	
146	0689	0888	35217	406	2733	14979				014	
146	0788	0750	35143	435	2748	14942				017	
146	0884	0733	35239	461	2758	14952				014	
146	0984	0656	35195	495	2765	14938				014	
146	1185	0494	35050	568	2774	14905					
160	1523	0429	35016	598	2779	14934					
160	2017	0358	34953	627	2781	14987					
160	2520	0319	34935	625	2784	15056					
160	3024	0280	34940	624	2788	15127					
160	3537	0249	34920	613	2789	15203					
160	3833	0239	34913	618	2789	15250					
160	4127	0238	34911	617	2789	15301					
160	4319	0238	34912	618	2789	15335				031	
160	4512	0237	34913	615	2789	15369				032	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2040	36229		2561	15247	0000	00000	2386
0010	1944 E	36203		2584	15222	0023	00001	2168
0020	1856 H	36179		2605	15198	0044	00004	1974
*0030	1776 I	36156		2623	15177	0063	00009	1804
0050	1590	36107		2664	15124	0095	00022	1425
0075	1512 F	36064		2678	15103	0130	00044	1297
0100	1481	36027		2682	15097	0162	00073	1266
0125	1444	35990		2688	15089	0193	00109	1222
0150	1419	35960		2691	15084	0224	00152	1200
0175	1411 B	35950		2691	15086	0254	00202	1200
0200	1408	35943		2692	15089	0284	00261	1205
0225	1394	35928		2693	15088	0315	00327	1196
0250	1379	35907		2695	15087	0345	00400	1188

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVa
0300	1352	35842		2695	15086	0405	00570	1195
0400	1262	35682		2701	15070	0524	00997	1161
0500	1181	35562		2708	15057	0639	01528	1120
0600	1039	35381		2720	15021	0746	02135	1014
0700	0869	35202		2735	14973	0842	02770	0877
0800	0746 B	3515 B		2749	14942	0924	03396	0736
1000	0642	35183		2766	14935	1058	04624	0590
1200	0488	35046		2775	14905	1168	05866	0500
1500	0429 B	35014		2779	14930	1317	07923	0475
2000	0360	34955		2781	14985	1556	12241	0468
2500	0320	34935		2784	15054	1793	17742	0463
3000	0282	34940		2788	15123	2022	24231	0434
3500	0251	34922		2789	15197	2242	31630	0426
4000	0238	34911		2789	15279	2463	40235	0437
4500	0237	34913		2789	15368	2693	50374	0457

C-REF-NO 009 YR 1964 DEPTH 4041 WAVES 1 0221 AIR T 19.5 VIS 7
 CONS. NO 078 MONTH 7 MXSAMPD 42 WAVES 2 3421 WET B 17.0 STN
 LAT 41-585N DAY 08 NO.DPTH 23 WND-DIR 030 WW-CODE 03
 LON 35-290W HR 22.1 W-COLOR WND-SPD 07 CLD-TPE 6
 MARSD SQ 148 C/I 1810 W-TRNSP BARO 1030.6 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	P04 -P-	NO2	NO3	SIO	PH
221	0000	192	35872		2565	15209					
221	0050	1504	35981	577	2674	15095				003	
221	0099	1422	35959	538	2690	15077				006	
221	0148	1389	35945	541	2696	15074				005	
221	0197	1368	35899	541	2697	15075				006	
221	0246	1355	35878	543	2698	15078				005	
221	0295	1316	35802	541	2700	15072				006	
221	0393	1275	35732	551	2703	15074				005	
221	0491	1222	35642	529	2706	15071				007	
221	0590	1137	35511	470	2712	15056				008	
221	0689	0987	35297	393	2723	15016				013	
221	0789	0828	35204	404	2741	14973				015	
221	0889	0726	35154	447	2752	14949				015	
221	0989	0675	35200	480	2763	14947				014	
221	1189	0562	35160	538	2775	14934				014	
233	1510	0430	35015	600	2779	14932				013	
233	2007	0367	34979	621	2782	14989				014	
233	2503	0326	34950	627	2784	15056				017	
233	2997	0288	34946	621	2787	15125				021	
233	3499	0255	34924	615	2789	15198				026	
233	3794	0244		615						029	
233	3993	0240	34922	612	2790	15279				030	
233	4189	0238	34909	615	2789	15312				030	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1920	35872		2565	15209	0000	00000	2345
0010	1830 D	3589 B		2590	15186	0022	00001	2116
0020	1749 H	3591 C		2612	15164	0043	00004	1913
*0030	1675 I	3593 D		2631	15144	0061	00009	1735
0050	1504	35981		2674	15095	0092	00021	1332
0075	1439 F	3598 B		2688	15079	0124	00041	1207
0100	1421	35959		2690	15077	0154	00069	1191
0125	1401	35953		2694	15074	0184	00103	1161
0150	1388	35943		2696	15074	0213	00144	1150
0175	1376	35920		2697	15074	0242	00192	1150
0200	1367	35898		2697	15075	0271	00248	1156
0225	1362	35889		2697	15077	0300	00312	1158
0250	1352	35872		2698	15078	0329	00383	1158
0300	1313	35797		2700	15072	0388	00548	1150

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1272	35727		2703	15074	0504	00964	1147
0500	1216	35633		2707	15070	0619	01497	1134
0600	1123	35489		2713	15053	0731	02131	1089
0700	0968	35283		2725	15011	0836	02829	0985
0800	0814	35195		2743	14969	0927	03525	0813
1000	0669	35201		2764	14946	1071	04845	0617
1200	0556	35155		2775	14934	1186	06133	0515
1500	0433	35020		2779	14932	1337	08222	0476
2000	0367	34979		2782	14989	1575	12509	0460
2500	0326	34950		2784	15056	1809	17958	0461
3000	0288	34946		2787	15126	2039	24471	0439
3500	0255	34924		2789	15199	2262	31954	0431
4000	0240	34916		2789	15280	2484	40602	0436

C-REF-NO 009 YR 1964 DEPTH 3637 WAVES 1 0222 AIR T 20.5 VIS 7
 CONS. NO 079 MONTH 7 MXSAMPD 37 WAVES 2 3622 WET B 19.0 STN
 LAT 42-582N DAY 09 NO.DPTH 23 WND-DIR 030 WW-CODE 01
 LON 35-280W HR 05.8 W-COLOR WND-SPD 07 CLD-TPE 6
 MARSD SQ 148 C/I 1810 W-TRNSP BARO 1030.0 CLD-AMT 6 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SID	PH
058	0000	192	35977		2573	15211					
058	0050	1546	36056	561	2670	15110				005	
058	0099	1436	35952	546	2686	15081				006	
058	0149	1390	35879	535	2690	15074				006	
058	0198	1380	35873	531	2692	15079				005	
058	0248	1368	35886	546	2696	15083				005	
058	0298	1304	35756	522	2699	15068				006	
058	0397	1268	35724	535	2704	15072				005	
058	0497	1210	35624	526	2707	15068				007	
058	0595	1032		398						014	
058	0691	0854		391						015	
058	0790	0651	34998	458	2750	14901				015	
058	0886	0597	35039	494	2761	14896				015	
058	0988	0556	35056	583	2767	14897				014	
058	1185	0468	35026	586	2775	14894					
069	1534	0388	34972	625	2780	14918					
069	1781	0368	34943	633	2780	14951					
069	2032	0360	34951	631	2781	14990					
069	2522	0325	34949	630	2784	15059					
069	3025	0284	34937	630	2787	15129					
069	3320	0261	34928	632	2788	15170					
069	3527	0253	34927	632	2789	15203				023	
069	3726	0250	34921	635	2789	15236				024	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1920	35977		2573	15211	0000	00000	2269
0010	1838 C	3599 B		2595	15189	0022	00001	2064
0020	1763 F	3600 D		2615	15170	0042	00004	1882
*0030	1695 H	3601 F		2632	15151	0060	00009	1722
0050	1546	36056		2670	15110	0091	00021	1367
0075	1470 D	3601 C		2684	15089	0124	00042	1246
0100	1435	35950		2686	15081	0155	00070	1225
0125	1406	35908		2689	15075	0186	00105	1205
0150	1390	35878		2691	15074	0216	00148	1201
0175	1383	35871		2691	15076	0246	00199	1200
0200	1380	35875		2692	15079	0276	00257	1199
0225	1377	3589 B		2694	15082	0306	00322	1190
0250	1366	35881		2696	15082	0336	00395	1179
0300	1303	35754		2699	15068	0395	00562	1161

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1267	35722		2704	15072	0511	00979	1142
0500	1205	35616		2707	15066	0626	01508	1126
0600	1023	3537 I		2722	15016	0733	02111	0996
0700	0833	3516 I		2737	14959	0827	02732	0852
0800	0642	35000		2752	14899	0905	03331	0695
1000	0550	35055		2768	14897	1031	04488	0554
1200	0463	35024		2776	14894	1136	05670	0483
1500	0392	34977		2780	14914	1279	07643	0453
2000	0361	34949		2781	14985	1514	11904	0473
2500	0327	34949		2784	15057	1752	17430	0462
3000	0286	34938		2787	15125	1983	23978	0442
3500	0254	34927		2789	15198	2205	31448	0427

C-REF-NO 009	YR 1964	DEPTH 3689	WAVES 1 0321	AIR T 18.4	VIS 7
CONS. NO 080	MONTH 7	MXSAMPD 38	WAVES 2 3322	WET B 16.5	STN
LAT 44-005N	DAY 09	NO.DPTH 22	WND-DIR 040	WW-CODE 03	
LON 35-280W	HR 13.1	W-COLOR	WND-SPD 08	CLD-TPE 5	
MARSD SQ 148	C/I 1810	W-TRNSP	BARO 1031.1	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SID	PH
131	0000	190	35906		2573	15204					
131	0047	1468	35991	531	2682	15084				004	
131	0095	1393	35892	518	2691	15066				006	
131	0142	1384	35917	533	2695	15071				005	
131	0190	1318	35779	515	2698	15056				007	
131	0238	1282	35760	536	2704	15051				006	
131	0285	1262	35727	544	2705	15052				006	
131	0380	1162	35552	499	2711	15031				008	
131	0475	0947	35254	393	2726	14966				014	
131	0572	0766	35117	416	2744	14912				015	
131	0669	0636	35076	472	2759	14876				015	
131	0768	0576	35068	511	2766	14869				014	
131	0868	0553	35116	533	2772	14877				014	
131	0968	0482	35092	574	2779	14864				013	
131	1168	0413	34992	617	2779	14867				013	
141	1487	0377	34950	637	2779	14905				013	
141	1986	0352	34950	633	2782	14979				014	
141	2488	0319	34946	635	2785	15051				016	
141	2987	0282	34939	635	2787	15121				019	
141	3383	0256	34930	627	2789	15179				023	
141	3580	0245	34922	627	2789	15208				024	
141	3784	0232	34918	632	2790	15239				025	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1900	35906		2573	15204	0000	00000	2271
0010	1801 E	3592 C		2599	15178	0022	00001	2031
0020	1712 I	3592 F		2621	15153	0041	00004	1821
*0030	1632 I	3593 I		2641	15131	0058	00008	1639
0050	1457 B	35986		2684	15081	0087	00020	1230
0075	1398 F	3594 D		2693	15065	0117	00039	1152
0100	1392	3590 B		2691	15067	0147	00065	1178
0125	1387 B	3591 D		2694	15069	0176	00099	1164
0150	1374	3590 B		2695	15069	0205	00141	1157
0175	1340 B	3583 C		2697	15061	0235	00189	1148
0200	1309	3577 B		2699	15054	0263	00245	1132
0225	1289	3576 B		2702	15052	0292	00306	1110
0250	1277	35754		2704	15051	0319	00374	1097
0300	1253	35708		2705	15051	0375	00530	1097
0400	1120 B	3549 C		2714	15019	0482	00916	1035

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0896	35206		2731	14950	0579	01359	0879
0600	0722	35099		2749	14899	0659	01808	0708
0700	0611	35069		2761	14872	0725	02242	0588
0800	0569 B	3508 B		2768	14872	0781	02678	0532
1000	0466	35076		2780	14863	0878	03566	0427
1200	0407	34984		2779	14870	0966	04562	0439
1500	0376	34950		2779	14907	1102	06451	0452
2000	0351	34950		2782	14981	1333	10634	0459
2500	0318	34946		2785	15053	1565	16020	0452
3000	0281	34939		2788	15123	1791	22435	0434
3500	0249	34925		2789	15197	2010	29790	0422

C-REF-NO 009 YR 1964 DEPTH 3902 WAVES 1 2321 AIR T 19.5 VIS 8
 CONS. NO 081 MONTH 7 MXSAMPD 40 WAVES 2 3621 WET B 17.5 STN
 LAT 45-019N DAY 09 NO.DPTH 23 WND-DIR 230 WW-CODE 01
 LON 35-300W HR 20.2 W-COLOR WND-SPD 06 CLD-TPE X
 MARSD SQ 148 C/I 1810 W-TRNSP BARO 1030.1 CLD-AMT 9 HW

OBSERVED

GMT	DEPTH	TEMP	SAL	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
202	0000	192	35878		2566	15210						
202	0050	1369	35760	581	2686	15049					004	
202	0100	1314	35804	556	2700	15040					004	
202	0150	1266	35723	538	2704	15031					006	
202	0200	1236	35686	544	2707	15028					006	
202	0250	1205	35630	544	2709	15025					006	
202	0300	1163	35561	535	2711	15018					007	
202	0399	1062	35399	493	2717	14997					009	
202	0499	0876	35147	409	2729	14942					014	
202	0599	0758	35131	430	2746	14913					015	
202	0698	0691	35184	468	2760	14904					015	
202	0798	0612	35137	510	2767	14889					014	
202	0898	0529	35081	549	2773	14871					013	
202	0997	0476	35031	583	2775	14866					014	
202	1197	0430	35009	607	2778	14880						
214	1518	0372	34932	635	2778	14908						
214	2012	0352	34940	635	2781	14984						
214	2514	0320	34943	633	2784	15056						
214	3015	0283	34936	635	2787	15126						
214	3311	0260	34935	628	2789	15168						
214	3606	0246	34918	628	2789	15213						
214	3814	0234	34932	633	2791	15245					026	
214	4011	0224		634							023	

INTERPOLATED

DEPTH	TEMP	SAL	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1920	35878		2566	15210	0000	00000	2340
0010	1806 H	3586 C		2594	15179	0022	00001	2081
0020	1702 I	3585 F		2618	15150	0042	00004	1854
*0030	1608 I	3583 H		2639	15123	0060	00009	1658
0050	1369	35760		2686	15049	0089	00020	1217
0075	1310 I	3578 D		2699	15034	0118	00038	1094
0100	1314	35804		2700	15040	0145	00063	1091
0125	1288	3577 B		2703	15035	0173	00095	1074
0150	1266	35723		2704	15031	0200	00133	1071
0175	1250	35703		2706	15029	0226	00178	1062
0200	1236	35686		2707	15028	0253	00229	1054
0225	1221	35660		2708	15027	0280	00287	1052
0250	1205	35630		2709	15025	0306	00352	1050
0300	1163	35561		2711	15018	0359	00500	1036

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1060	35396		2717	14996	0461	00868	0995
0500	0875	35146		2729	14942	0556	01305	0888
0600	0757	35132		2746	14913	0638	01765	0736
0700	0689	35184		2760	14904	0707	02218	0614
0800	0610	35136		2767	14889	0766	02671	0551
1000	0475	35030		2775	14866	0869	03621	0472
1200	0429	35008		2778	14880	0962	04677	0450
1500	0375	34936		2778	14906	1101	06604	0460
2000	0352	34939		2781	14982	1337	10866	0468
2500	0321	34943		2784	15054	1572	16341	0458
3000	0284	34936		2787	15124	1802	22849	0440
3500	0251	34923		2789	15197	2023	30292	0426
4000	0225							

C-REF-NO 009 YR 1964 DEPTH 4178 WAVES 1 2522 AIR T 21.0 VIS 7
 CONS. NO 082 MONTH 7 MXSAMPD 43 WAVES 2 00X0 WET B 19.5 STN
 LAT 44-587N DAY 10 NO.DPTH 23 WND-DIR 260 WW-CODE 03
 LON 36-328W HR 02.1 W-COLOR WND-SPD 09 CLD-TPE 8
 MARSD SQ 148 C/I 1810 W-TRNSP BARO 1027.0 CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
021	0000	186	35795		2575	15192						
021	0050	1420	35845	533	2681	15067					004	
021	0100	1315	35777	546	2698	15040					006	
021	0150	1287	35746	546	2701	15038					006	
021	0200	1242	35669	540	2704	15030					006	
021	0249	1212	35653	559	2709	15028					005	
021	0299	1166	35570	546	2711	15019					006	
021	0398	1104	35480	546	2716	15013					007	
021	0498	0958	35272	400	2725	14974					013	
021	0597	0772	35100	407	2741	14918					016	
021	0695	0665	35067	461	2754	14892					015	
021	0794	0581	35053	508	2764	14875					014	
021	0892	0532	35040	542	2769	14871					013	
021	0990	0465	34989	583	2773	14859					013	
021	1189	0418	34962	612	2776	14873					013	
033	1493	0378	34934	633	2778	14907					012	
033	1993	0355	34940	637	2781	14982					014	
033	2490	0329	34938	635	2783	15055					018	
033	2989	0293	34940	636	2787	15126					017	
033	3496	0255	34931	629	2789	15198					023	
033	3895	0234	34911	636	2789	15259					023	
033	4103	0226	34898	642	2789	15292					022	
033	4296	0219	34906	655	2790	15323					019	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1860	35795		2575	15192	0000	00000	2255
0010	1764 D	3580 B		2599	15166	0022	00001	2026
0020	1676 G	3581 C		2621	15142	0041	00004	1824
*0030	1597 I	3581 D		2640	15119	0058	00008	1648
0050	1420	35845		2681	15067	0088	00020	1257
0075	1342 E	3582 B		2696	15045	0118	00039	1129
0100	1315	35777		2698	15040	0146	00064	1112
0125	1297 B	35762		2701	15038	0174	00097	1096
0150	1287	35746		2701	15038	0201	00136	1094
0175	1265	3571 B		2703	15034	0229	00181	1087
0200	1242	35669		2704	15030	0256	00234	1078
0225	1227	3566 B		2707	15029	0283	00293	1062
0250	1211	35652		2709	15028	0310	00358	1046
0300	1165	35569		2711	15019	0362	00506	1034

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1102	35476		2716	15012	0465	00876	1011
0500	0954	35268		2726	14973	0563	01327	0929
0600	0768	35098		2742	14917	0649	01811	0777
0700	0660	35066		2755	14891	0722	02292	0658
0800	0578	35053		2764	14875	0784	02768	0567
1000	0461	34986		2773	14859	0891	03747	0486
1200	0416	34961		2776	14874	0987	04840	0468
1500	0378	34934		2778	14908	1129	06814	0465
2000	0355	34940		2781	14983	1367	11113	0471
2500	0328	34938		2783	15057	1607	16696	0472
3000	0292	34940		2787	15128	1843	23373	0450
3500	0255	34931		2789	15199	2067	30896	0426
4000	0230	34903		2789	15276	2286	39418	0429

C-REF-NO 009 YR 1964 DEPTH 4173 WAVES 1 2121 AIR T 20.5 VIS 8
 CONS. NO 083 MONTH 7 MXSAMPD 43 WAVES 2 00X0 WET B 19.0 STN
 LAT 44-227N DAY 10 NO.DPTH 23 WND-DIR 220 WW-CODE 01
 LON 37-355W HR 09.6 W-COLOR WND-SPD 07 CLD-TPE 8
 MARSD SQ 148 C/I 1810 W-TRNSP BARO 1027.6 CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2 NO3	SIO	PH
096	0000	194	35935		2565	15216				
096	0050	1450	35802	577	2672	15076			006	
096	0100	1381	35877	532	2692	15063			008	
096	0150	1334	35780	550	2695	15054			006	
096	0200	1296	35747	550	2700	15050			006	
096	0250	1263		537					006	
096	0300	1221	35628	517	2705	15039			007	
096	0400	1037	35333	388	2717	14987			013	
096	0500	0834	35121	386	2734	14926			015	
096	0599	0681	35026	440	2749	14882			016	
096	0695	0636	35099	477	2760	14881			014	
096	0794	0561	35069	524	2768	14867			014	
096	0890	0485	34988	568	2770	14851			013	
096	0992	0446	34960	595	2773	14851			013	
096	1187	0408	34958	623	2777	14868				
108	1484	0369	34926	641	2778	14901				
108	1981	0354	34960	635	2782	14979				
108	2480	0330	34968	637	2785	15054				
108	2975	0298	34970	631	2788	15126				
108	3470	0263		635						
108	3903	0234	34928	631	2791	15260				
108	4098	0230	34913	636	2790	15293			023	
108	4294	0223	34898	648	2789	15324			020	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1940	35935		2565	15216	0000	00000	2348
0010	1838 F	3592 D		2590	15188	0022	00001	2114
0020	1744 I	3591 G		2612	15163	0043	00004	1909
*0030	1659 I	3589 I		2631	15139	0061	00009	1730
0050	1450	35802		2672	15076	0092	00021	1350
0075	1388 H	3584 E		2688	15060	0124	00042	1205
0100	1381	35877		2692	15063	0154	00068	1170
0125	1356	3584 C		2694	15058	0183	00102	1157
0150	1334	35780		2695	15054	0213	00143	1161
0175	1314	35761		2697	15052	0242	00192	1144
0200	1296	35747		2700	15050	0270	00247	1125
0225	1280	35729		2702	15048	0299	00309	1114
0250	1263	3570 B		2703	15046	0327	00377	1107
0300	1221	35628		2705	15039	0382	00534	1095

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	1037	35333		2717	14987	0488	00912	1001
0500	0834	35121		2734	14926	0581	01338	0843
0600	0680	35027		2749	14882	0659	01775	0700
0700	0633	35099		2761	14881	0724	02210	0594
0800	0556	35064		2768	14866	0781	02647	0529
1000	0444	34959		2773	14852	0884	03593	0484
1200	0406	34957		2777	14869	0979	04671	0458
1500	0368	34926		2778	14904	1119	06610	0458
2000	0353	34961		2782	14982	1350	10793	0454
2500	0329	34968		2785	15058	1581	16150	0451
3000	0296	34970		2789	15130	1807	22571	0435
3500	0261	34953		2790	15202	2026	29916	0420
4000	0232	34921		2790	15277	2241	38285	0420

C-REF-NO 009	YR 1964	DEPTH 3530	WAVES 1 2123	AIR T 22.5	VIS 7
CONS. NO 084	MONTH 7	MXSAMPD 36	WAVES 2 00X0	WET B 20.5	STN
LAT 43-420N	DAY 10	NO.DPTH 22	WND-DIR 220	WW-CODE 01	
LON 38-370W	HR 16.8	W-COLOR	WND-SPD 10	CLD-TPE 8	
MARSD SQ 148	C/I 1810	W-TRNSP	BARO 1026.5	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	P04 -P-	NO2	NO3	SIO	PH
168	0000	206	36053		2542	15250				007	
168	0048	1542	36008	578	2667	15107				006	
168	0097	1462	35978	511	2683	15090				009	
168	0145	1404	35876	529	2687	15078				008	
168	0194	1430	35995	534	2691	15096				004	
168	0243	1406	35951	534	2693	15095				004	
168	0292	1357	35823	522	2693	15086				005	
168	0388	1264	35695	534	2702	15069				006	
168	0488	1096	35407	395	2712	15024				011	
168	0583	0905	35185	377	2727	14967				015	
168	0676	0726	35070	419	2746	14913				015	
168	0774	0606	35028	483	2759	14881				015	
168	0869	0574	35060	514	2765	14885				014	
168	0968	0526	35057	595	2771	14882				014	
168	1165	0451	35012	592	2776	14883				013	
178	1602	0381	34978	630	2781	14927				013	
178	1787	0372		627						015	
178	2288	0344	34976	633	2785	15028				017	
178	2780	0312	34967	630	2787	15098				020	
178	3173	0284	34963	630	2789	15155				021	
178	3377	0264	34950	630	2790	15181				024	
178	3566	0243	34937	632	2791	15205					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2060	36053		2542	15250	0000	00000	2565
0010	1948 G	36049		2572	15221	0024	00001	2289
0020	1846 I	3604 B		2597	15194	0046	00004	2048
*0030	1754 I	3604 C		2620	15169	0066	00009	1839
0050	1534 B	36007		2669	15105	0098	00022	1377
0075	1469 I	35995		2683	15088	0131	00043	1255
0100	1457	35970		2683	15089	0163	00072	1257
0125	1422	3591 D		2686	15081	0194	00108	1236
0150	1406	3589 B		2688	15079	0225	00152	1228
0175	1418 C	3595 E		2690	15088	0256	00203	1217
0200	1429	35996		2691	15096	0287	00262	1210
0225	1419	35982		2692	15097	0317	00329	1208
0250	1400	35934		2693	15094	0348	00403	1210
0300	1350	3581 B		2694	15085	0409	00576	1213
0400	1247	3566 B		2703	15065	0528	01002	1145

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	1072	35375		2714	15017	0639	01513	1056
0600	0870	35157		2731	14956	0737	02065	0892
0700	0689	35052		2750	14902	0818	02602	0710
0800	0594 B	35035		2761	14881	0885	03111	0602
1000	0512	35051		2772	14881	0997	04139	0505
1200	0442	35007		2777	14885	1095	05251	0467
1500	0388	34981		2780	14913	1234	07175	0445
2000	0361	34974		2783	14986	1463	11310	0455
2500	0331	34972		2786	15058	1693	16669	0451
3000	0297	34966		2788	15130	1921	23121	0439
3500	0251	34942		2790	15197	2138	30422	0412

C-REF-NO 009	YR 1964	DEPTH 4508	WAVES 1 2223	AIR T 21.0	VIS 7
CONS. NO 085	MONTH 7	MXSAMPD 46	WAVES 2 00X0	WET B 20.0	STN
LAT 43-119N	DAY 11	NO.DPTH 24	WND-DIR 220	WW-CODE 01	
LON 39-376W	HR 00.6	W-COLOR	WND-SPD 12	CLD-TPE 6	
MARSD SQ 148	C/I 1810	W-TRNSP	BARO 1025.3	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
006	0000	208	36193		2547	15257				006	
006	0049	1646	36269	523	2663	15143				006	
006	0098	1556	36185	528	2678	15122				007	
006	0148	1462	36011	516	2685	15099				008	
006	0197	1440	35976	527	2687	15099				005	
006	0246	1430	35992	532	2691	15104				005	
006	0295	1420	35971	531	2691	15109				005	
006	0393	1302	35733	512	2697	15083				007	
006	0492	1204	35587	489	2706	15064				009	
006	0589	0993	35273	368	2720	15002				015	
006	0688	0791	35100	398	2739	14940				017	
006	0786	0619	35005	470	2755	14888				016	
006	0884	0545	35008	522	2765	14875				015	
006	0985	0501	35009	555	2770	14874				015	
006	1186	0441	35016	597	2778	14882					
020	1488	0394	34994	616	2781	14913					
020	1966	0365	34974	624	2782	14982					
020	2452	0342	34978	620	2785	15055					
020	2943	0308	34970	618	2788	15125					
020	3440	0270	34958	621	2790	15195					
020	3940	0245	34945	625	2791	15272					
020	4147	0241	34943	621	2791	15307					
020	4354	0238	34937	622	2791	15342				029	
020	4552	0233	34936	631	2791	15375				029	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2080	36193		2547	15257	0000	00000	2515
0010	1989 F	36216		2573	15234	0024	00001	2272
0020	1906 I	3623 B		2597	15213	0046	00004	2055
*0030	1830 I	3625 B		2617	15193	0066	00009	1865
0050	1642	36269		2664	15142	0099	00023	1424
0075	1577 G	36240		2677	15125	0133	00044	1308
0100	1552	36178		2678	15121	0166	00074	1306
0125	1501 B	3609 C		2683	15108	0199	00112	1271
0150	1460	36008		2685	15098	0230	00156	1252
0175	1445	35980		2687	15097	0262	00209	1247
0200	1439	35977		2687	15099	0293	00269	1245
0225	1434	35984		2689	15102	0324	00338	1236
0250	1430	35992		2691	15105	0356	00413	1230

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1415	35961		2691	15108	0418	00589	1237
0400	1297	35724		2698	15082	0541	01030	1198
0500	1189	3556 B		2707	15060	0658	01573	1133
0600	0970	35248		2722	14995	0766	02175	0991
0700	0767	35084		2741	14933	0856	02776	0802
0800	0604	35002		2757	14885	0929	03335	0641
1000	0495	35010		2771	14874	1046	04404	0514
1200	0438	35015		2778	14884	1144	05511	0456
1500	0393	34993		2781	14915	1281	07408	0442
2000	0363	34974		2782	14987	1510	11548	0459
2500	0339	34978		2785	15062	1743	16982	0460
3000	0303	34969		2788	15133	1975	23549	0447
3500	0266	34956		2790	15204	2198	31047	0426
4000	0244	34945		2791	15282	2416	39507	0423
4500	0234	34937		2791	15367	2636	49244	0436

C-REF-NO 009	YR 1964	DEPTH 4727	WAVES 1 2423	AIR T 20.5	VIS 6
CONS. NO 086	MONTH 7	MXSAMPD 48	WAVES 2 2521	WET B 19.5	STN
LAT 42-338N	DAY 11	NO.DPTH 24	WND-DIR 230	WW-CODE 60	
LON 40-495W	HR 09.5	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1024.1	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SID	PH
095	0000	210	36112		2536	15261				002	
095	0048	1694	36309	513	2655	15157				003	
095	0097	1570	36136	500	2671	15126				005	
095	0145	1468	35957	509	2680	15099				005	
095	0193	1433	35942	522	2686	15096				005	
095	0242	1430	35947	530	2687	15103				005	
095	0289	1407	35911	530	2689	15103				005	
095	0386	1233	35584	470	2700	15057				008	
095	0485	1188	35560	513	2707	15057				007	
095	0580	1054	35328	438	2713	15023				011	
095	0675	0862	35128	392	2730	14966				015	
095	0773	0692	35015	435	2746	14915				015	
095	0870	0593	35021	492	2760	14892				015	
095	0970	0550	35054	522	2768	14892				014	
095	1166	0456	35028	586	2777	14886				013	
110	1493	0396	34987	623	2780	14915				013	
110	1979	0361	34962	637	2782	14982				013	
110	2467	0340	34977	625	2785	15057				015	
110	2966	0304	34965	625	2787	15127				018	
110	3467	0267	34939	621	2789	15198				023	
110	3957	0235	34918	630	2790	15270				026	
110	4446	0227	34916	622	2790	15353				028	
110	4643	0228	34914	635	2790	15389				024	
110	4830	0224	34921	645	2791	15421				021	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2100	36112		2536	15261	0000	00000	2626
0010	2012 D	3616 D		2563	15240	0025	00001	2373
0020	1931 H	3619 G		2587	15220	0048	00005	2148
*0030	1857 I	3622 I		2608	15201	0069	00010	1950
0050	1686	36306		2657	15155	0103	00024	1494
0075	1606 F	3624 E		2670	15134	0139	00047	1374
0100	1562	36123		2671	15124	0174	00078	1370
0125	1505	3602 B		2677	15109	0208	00117	1328
0150	1462	35951		2681	15098	0241	00163	1297
0175	1440	3594 B		2684	15095	0273	00217	1269
0200	1432	35943		2686	15097	0305	00279	1255
0225	1430	35947		2687	15100	0337	00348	1257
0250	1428	35945		2687	15104	0368	00425	1261

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1388 C	3588 D		2691	15098	0432	00603	1244
0400	1226 C	3558 D		2701	15056	0553	01039	1166
0500	1172	3553 B		2707	15054	0669	01573	1125
0600	1015	35281		2716	15012	0779	02190	1045
0700	0814	35089		2734	14951	0875	02834	0872
0800	0658	35009		2750	14906	0955	03447	0712
1000	0535	35054		2770	14890	1082	04596	0533
1200	0446	35023		2778	14887	1182	05730	0461
1500	0395	34986		2780	14916	1321	07655	0450
2000	0360	34963		2782	14985	1553	11847	0462
2500	0338	34977		2785	15062	1787	17292	0458
3000	0301	34963		2788	15132	2018	23857	0447
3500	0264	34937		2789	15203	2244	31461	0437
4000	0234	34918		2790	15278	2465	40043	0425
4500	0227	34915		2790	15364	2687	49837	0439

C-REF-NO 009 YR 1964 DEPTH 4550 WAVES 1 2333 AIR T 22.5 VIS 6
 CONS. NO 087 MONTH 7 MXSAMPD 48 WAVES 2 2633 WET B 21.5 STN
 LAT 41-583N DAY 11 NO.DPTH 24 WND-DIR 230 WW-CODE 03
 LON 41-510W HR 18.0 W-COLOR WND-SPD 10 CLD-TPE 6
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1022.1 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
180	0000	215	36120		2523	15274				005	
180	0049	1758	36278	518	2637	15176				004	
180	0097	1604	36194	508	2667	15137				005	
180	0146	1474	35933	462	2677	15101				007	
180	0194	1425	35939	520	2688	15093				005	
180	0243	1458	36037	538	2688	15113				004	
180	0292	1460	36045	544	2688	15122				004	
180	0389	1453	36079	542	2692	15136				005	
180	0488	1250	35614	463	2699	15080				008	
180	0582	0928	35157	350	2721	14975				016	
180	0675	0766	35025	402	2736	14928				017	
180	0765	0615	34913	462	2749	14882				016	
180	0858	0610	35074	500	2762	14897				015	
180	0955	0527	35033	534	2769	14879				015	
180	1156	0457	35019	590	2776	14884					
195	1459	0399	34968	615	2778	14910					
195	1955	0370	34965	625	2781	14982					
195	2450	0342	34963	622	2784	15054					
195	2945	0308	34956	632	2786	15125					
195	3440	0268	34947	622	2789	15194					
195	3923	0240	34924	624	2790	15266					
195	4414	0228	34914	622	2790	15348					
195	4610	0226	34909	626	2790	15382				030	
195	4800	0225	34925	646	2791	15416				025	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2150	36120		2523	15274	0000	00000	2751
0010	2066 C	36167		2549	15254	0026	00001	2502
0020	1988 F	3621 B		2573	15235	0050	00005	2279
*0030	1915 H	3624 B		2594	15217	0072	00011	2081
0050	1753	36278		2638	15175	0110	00026	1670
0075	1659 D	36258		2659	15151	0150	00051	1477
0100	1594	3618 B		2668	15134	0186	00083	1401
0125	1523	3604 F		2674	15114	0221	00123	1354
0150	1467	35927		2678	15099	0254	00171	1324
0175	1435	3592 B		2684	15093	0287	00225	1274
0200	1428	35951		2688	15095	0319	00286	1240
0225	1443 B	3600 B		2689	15105	0350	00354	1243
0250	1459	36041		2688	15115	0382	00431	1256

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1463	3606 B		2688	15124	0445	00611	1268
0400	1439	3604 C		2692	15133	0573	01069	1258
0500	1208 C	3555 B		2702	15066	0696	01636	1181
0600	0890 B	3512 C		2725	14964	0804	02240	0954
0700	0717 B	3498 C		2740	14912	0892	02830	0803
0800	0608 E	3497 F		2754	14886	0967	03401	0671
1000	0504 B	35026		2771	14878	1087	04495	0513
1200	0446	35012		2777	14887	1186	05617	0469
1500	0395	34966		2779	14915	1328	07592	0465
2000	0368	34965		2781	14988	1566	11888	0471
2500	0339	34962		2784	15062	1806	17456	0470
3000	0303	34955		2787	15133	2042	24168	0456
3500	0264	34944		2789	15203	2269	31786	0431
4000	0237	34922		2790	15279	2489	40345	0428
4500	0227	34910		2790	15363	2713	50200	0441

C-REF-NO 009 YR 1964 DEPTH 4652 WAVES 1 2433 AIR T 22.5 VIS 6
 CONS. NO 088 MONTH 7 MXSAMPD 47 WAVES 2 2622 WET B 21.5 STN
 LAT 41-167N DAY 12 NO.DPTH 24 WND-DIR 240 WW-CODE 01
 LON 42-469W HR 02.2 W-COLOR WND-SPD 12 CLD-TPE 2
 MARSD SQ 149 C/I 1810 W-TRNSP BARO 1020.6 CLD-AMT 5 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
022	0000	212	36120		2531	15267					002	
022	0048	1832	36312	590	2621	15198					003	
022	0096	1684	36304	594	2657	15162					004	
022	0144	1628	36250	495	2666	15153					005	
022	0193	1544	36094	498	2673	15133					004	
022	0241	1477	35980	499	2680	15118					004	
022	0290	1431	35902	487	2684	15111					005	
022	0388	1390	35857	506	2689	15113					005	
022	0484	1281	35632	477	2694	15090					007	
022	0586	1212	35580	441	2703	15082					009	
022	0683	1038	35337	369	2717	15034					013	
022	0783	0870	35149	371	2730	14987					016	
022	0883	0675	35020	434	2749	14927					016	
022	0986	0576	35050	507	2764	14905					015	
022	1183	0507	35068	558	2774	14910					014	
038	1458	0427	35001	593	2778	14922					013	
038	1946	0375	34958	617	2780	14982					014	
038	2404	0352	34966	623	2783	15051					016	
038	2871	0319	34965	617	2786	15117					018	
038	3331	0282	34944	621	2788	15181					020	
038	3795	0250	34924	617	2789	15248					025	
038	4308	0229	34914	619	2790	15330					028	
038	4513	0226	34906	620	2790	15365					029	
038	4704	0226	34914	639	2790	15399					023	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2120	36120		2531	15267	0000	00000	2672
0010	2052	3617 B		2553	15251	0026	00001	2468
0020	1989 B	3620 C		2573	15236	0050	00005	2283
*0030	1931 B	3624 D		2590	15222	0072	00011	2118
0050	1824	36314		2624	15196	0111	00026	1809
0075	1734	3632 B		2646	15174	0154	00054	1602
0100	1678	36302		2658	15161	0193	00089	1496
0125	1646 B	36280		2664	15155	0230	00131	1449
0150	1618	36233		2667	15150	0267	00182	1428
0175	1576	3616 B		2671	15140	0302	00242	1399
0200	1533	36075		2674	15130	0337	00309	1373
0225	1497	36014		2678	15122	0372	00384	1348
0250	1467	35963		2680	15116	0405	00466	1329

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1427	3590 B		2684	15111	0472	00654	1307
0400	1377	3583 B		2689	15110	0602	01123	1283
0500	1272 B	3562 C		2695	15089	0730	01713	1250
0600	1190 B	3555 B		2705	15077	0852	02402	1170
0700	1010	35301		2719	15026	0964	03146	1044
0800	0834 B	35119		2734	14976	1063	03901	0900
1000	0568	35053		2766	14904	1212	05255	0580
1200	0501	35065		2775	14910	1322	06491	0504
1500	0420	34994		2778	14926	1472	08560	0477
2000	0372	34958		2780	14990	1715	12960	0482
2500	0346	34967		2784	15065	1959	18632	0477
3000	0309	34960		2787	15135	2199	25427	0461
3500	0269	34936		2788	15205	2431	33217	0446
4000	0240	34920		2790	15280	2656	41967	0434
4500	0226	34906		2790	15363	2881	51894	0442

C-REF-NO 009	YR 1964	DEPTH 4687	WAVES 1 2433	AIR T 22.5	VIS 6
CONS. NO 089	MONTH 7	MXSAMPD 48	WAVES 2 2622	WET B 21.5	STN
LAT 40-526N	DAY 12	NO.DPTH 24	WND-DIR 240	WW-CODE 01	
LON 43-443W	HR 09.9	W-COLOR	WND-SPD 12	CLD-TPE 2	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1020.6	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
099	0000	197	36072		2568	15226				004	
099	0050	1568	36124	551	2670	15117				005	
099	0100	1472	36115	533	2691	15095				005	
099	0149	1464	36114	536	2693	15101				007	
099	0199	1467	36122	538	2693	15110				004	
099	0249	1470	36132	546	2693	15119				004	
099	0298	1472	36150	541	2694	15128				004	
099	0398	1476	36156	541	2693	15146				004	
099	0497	1480	36170	541	2693	15164				004	
099	0597	1480	36160	544	2693	15180				004	
099	0696	1482	36163	548	2693	15197				004	
099	0795	1483	36162	544	2692	15214				004	
099	0895	1464	36114	536	2693	15224				004	
099	0995	1147	35496	396	2709	15127				012	
099	1194	0664	35090	457	2756	14975					
115	1517	0456	35010	584	2775	14944					
115	2015	0382	34960	625	2779	14997					
115	2513	0358	34980	615	2783	15072					
115	3025	0314	34947	626	2785	15141					
115	3510	0278	34945	624	2788	15210					
115	4010	0240	34920	624	2790	15282					
115	4409	0228	34916	626	2790	15347					
115	4609	0227	34916	640	2790	15382				022	
115	4806	0222	34918	655	2791	15415				019	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1970	36072		2568	15226	0000	00000	2323
0010	1881 C	36082		2591	15203	0022	00001	2101
0020	1800 F	3609 B		2613	15181	0042	00004	1904
*0030	1727 I	3610 B		2631	15162	0061	00009	1731
0050	1568	36124		2670	15117	0092	00021	1365
0075	1495 E	36123		2686	15099	0124	00042	1218
0100	1472	36115		2691	15095	0155	00069	1183
0125	1462 B	36113		2693	15096	0184	00103	1170
0150	1464	36114		2693	15101	0214	00145	1182
0175	1465	36117		2693	15105	0244	00195	1189
0200	1467	36122		2693	15110	0274	00253	1198
0225	1469	36127		2693	15115	0304	00319	1205
0250	1470	36132		2693	15119	0335	00393	1212

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0300	1472	36150		2694	15128	0396	00567	1218
0400	1476	36156		2693	15146	0521	01016	1253
0500	1480	36170		2693	15164	0649	01608	1281
0600	1480	36160		2693	15181	0780	02351	1319
0700	1482	36163		2692	15198	0915	03253	1351
0800	1486	3617 B		2692	15216	1053	04321	1386
1000	1132	35477		2711	15122	1315	06732	1208
1200	0656	35085		2757	14973	1510	08884	0713
1500	0456 C	3501 B		2775	14941	1697	11445	0519
2000	0382	34960		2780	14994	1955	16074	0494
2500	0358	34979		2783	15070	2205	21873	0487
3000	0316	34949		2785	15138	2451	28890	0481
3500	0279	34945		2788	15209	2691	36918	0455
4000	0241	34921		2790	15281	2919	45766	0435
4500	0228	34916		2790	15364	3143	55661	0438

C-REF-NO 009	YR 1964	DEPTH 4532	WAVES 1 2334	AIR T 24.0	VIS 6
CONS. NO 090	MONTH 7	MXSAMPD 44	WAVES 2 2633	WET B 22.0	STN
LAT 40-402N	DAY 12	NO.DPTH 24	WND-DIR 240	WW-CODE 05	
LON 45-005W	HR 17.6	W-COLOR	WND-SPD 12	CLD-TPE 0	
MARSD SQ 149	C/I 1810	W-TRNSP	BARO 1019.1	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
176	0000	223	36032		2494	15294				003	
176	0049	1736	36164	490	2634	15168				004	
176	0098	1592	36134	488	2666	15133				005	
176	0146	1460	35948	549	2681	15097				005	
176	0195	1410	35893	527	2687	15088				005	
176	0244	1344	35756	472	2691	15073				007	
176	0292	1380	35885	524	2693	15094				005	
176	0387	1286	35710	496	2699	15076				007	
176	0483	1192	35575	484	2707	15059				008	
176	0575	1039	35340	422	2717	15017				012	
176	0666	0852	35114	386	2730	14960				016	
176	0758	0692	35032	438	2748	14913				016	
176	0849	0611	35038	482	2759	14896				015	
176	0946	0571	35069	515	2766	14896				015	
176	1142	0485	35048	569	2775	14894				014	
198	1417	0410	34970	615	2777	14908				013	
198	1902	0364	34932	638	2779	14970				013	
198	2381	0354	34931	620	2780	15047				016	
198	2865	0323	34952	620	2785	15118				018	
198	3340	0291	34943	628	2787	15186				019	
198	3843	0252	34944	632	2790	15258				022	
198	4040	0237	34918	660	2790	15286				022	
198	4234	0221	34909	638	2790	15313				023	
198	4427	0222	34916	648	2791	15348				022	

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2230	36032		2494	15294	0000	00000	3028
0010	2126 E	36072		2526	15269	0029	00001	2726
0020	2030 I	36105		2554	15246	0055	00005	2457
*0030	1941 I	36132		2580	15223	0079	00011	2218
0050	1731	36165		2635	15167	0118	00027	1701
0075	1637 G	36168		2658	15143	0158	00052	1493
0100	1586	36126		2666	15131	0195	00085	1418
0125	1512 B	3603 D		2676	15111	0230	00125	1336
0150	1455	35942		2682	15096	0263	00172	1287
0175	1426 B	3591 C		2685	15090	0295	00225	1258
0200	1401	3588 B		2688	15086	0326	00286	1242
0225	1364 C	3580 E		2690	15077	0357	00354	1230

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	1347 B	3577 C		2691	15075	0388	00429	1224
0300	1376 B	3588 C		2693	15094	0450	00603	1216
0400	1275	35694		2700	15075	0571	01036	1178
0500	1167	35535		2709	15052	0686	01569	1113
0600	0988	3527 B		2720	15002	0793	02172	1006
0700	0787	35070		2737	14940	0887	02792	0843
0800	0647	35028		2753	14902	0964	03383	0682
1000	0546	35070		2770	14895	1087	04511	0537
1200	0465	35032		2776	14895	1190	05673	0480
1500	0397	34958		2778	14916	1335	07688	0473
2000	0361	34929		2779	14985	1579	12106	0488
2500	0347	34937		2781	15065	1831	17970	0502
3000	0314	34950		2785	15137	2081	25048	0476
3500	0279	3495 B		2788	15209	2319	33026	0453
4000	0240	34923		2790	15280	2545	41827	0432

C-REF-NO 009	YR 1964	DEPTH 2981	WAVES 1 2322	AIR T 20.0	VIS 0
CONS. NO 091	MONTH 7	MXSAMPD 10	WAVES 2 2622	WET B 20.0	STN
LAT 42-320N	DAY 15	NO.DPTH 15	WND-DIR 230	WW-CODE 45	
LON 61-240W	HR 03.8	W-COLOR	WND-SPD 08	CLD-TPE X	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1019.7	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
038	0000	148	32539		2414	15037					
038	0010	1266	32514		2456	14968					
038	0020	0884	32263		2502	14829					
038	0030	0650	32781		2576	14746					
038	0049	0604	33639		2649	14742					
038	0074	0864	34528		2683	14860					
038	0098	0742	34456		2695	14816					
038	0147	0864	34861		2709	14876					
038	0196	0803	34925		2723	14862					
038	0296	0564	34723		2740	14781					
038	0395	0398	34657		2754	14728					
038	0495	0391	34742		2761	14743					
038	0594	0426	34860		2767	14776					
038	0794	0410	34924		2774	14803					
038	0994	0391	34933		2776	14828					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1480	32539		2414	15037	0000	00000	3785
0010	1266	32514		2456	14968	0036	00002	3391
0020	0884	32263		2502	14829	0068	00007	2947
0030	0650	32781		2576	14746	0094	00013	2247
0050	0615 C	3369 B		2652	14748	0132	00028	1530
0075	0861 B	3453 C		2683	14859	0167	00050	1239
0100	0744 B	3447 C		2696	14817	0197	00076	1122
0125	0790 I	3465 I		2704	14841	0224	00108	1053
0150	0863	34871		2710	14876	0250	00144	1006
0175	0843 C	3493 C		2717	14873	0275	00185	0939
0200	0794	3492 B		2724	14859	0297	00229	0876
0225	0738 D	3488 G		2729	14841	0319	00276	0827
*0250	0679 E	3484 H		2734	14821	0339	00325	0785
0300	0555	34718		2741	14778	0377	00432	0720
0400	0395	34659		2754	14728	0443	00667	0591
0500	0393	34748		2762	14745	0500	00928	0531
0600	0426	34864		2767	14777	0552	01219	0492
0700	0425 C	3491 C		2771	14793	0600	01542	0465
0800	0427 F	3495 F		2774	14811	0646	01898	0448
1000	0389	34931		2776	14829	0736	02728	0438

C-REF-NO 009	YR 1964	DEPTH 1213	WAVES 1 2322	AIR T 19.0	VIS 0
CONS. NO 092	MONTH 7	MXSAMPD 10	WAVES 2 2622	WET B 19.0	STN
LAT 42-500N	DAY 15	NO.DPTH 15	WNO-DIR 230	WW-CODE 45	
LON 61-440W	HR 06.5	W-COLOR	WNO-SPD 07	CLO-TPE X	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1018.2	CLO-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
065	0000	154	32143		2371	15052					
065	0010	1300	32279		2431	14976					
065	0020	0826	32616		2539	14811					
065	0029	0538	32896		2599	14702					
065	0048	0472	33475		2652	14686					
065	0071	0764	34331		2682	14818					
065	0095	0658	34298		2694	14780					
065	0144	0556	34300		2708	14747					
065	0192	0828	34894		2717	14870					
065	0286	0585	34750		2740	14788					
065	0381	0499	34842		2757	14770					
065	0478	0416	34801		2763	14751					
065	0575	0411	34852		2768	14766					
065	0774	0418	34933		2774	14803					
065	0975	0398	34959		2778	14829					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1540	32143		2371	15052	0000	00000	4198
0010	1300	32279		2431	14976	0039	00002	3627
0020	0826	32616		2539	14811	0071	00006	2601
0030	0522 B	32925		2603	14696	0094	00012	1990
0050	0497 E	3356 E		2656	14698	0129	00026	1486
0075	0760 E	3436 H		2685	14818	0163	00047	1222
0100	0635 B	3428 C		2696	14772	0192	00074	1117
0125	0564 E	3426 G		2703	14747	0220	00105	1051
0150	0587 F	3437 F		2709	14762	0245	00142	0999
0175	0726 I	3468 I		2715	14825	0270	00183	0956
0200	0824 H	3491 I		2719	14870	0294	00228	0927
0225	0792 I	3493 I		2725	14862	0317	00278	0871
*0250	0729 I	3489 I		2731	14842	0338	00329	0811
0300	0567 B	3476 C		2743	14784	0376	00437	0703
0400	0479	3484 B		2759	14765	0439	00661	0554
0500	0411	34809		2764	14753	0493	00907	0506
0600	0412	34865		2769	14771	0543	01187	0475
0700	0416	34908		2772	14789	0590	01502	0457
0800	0409 C	34936		2775	14804	0635	01852	0439

C-REF-NO 009	YR 1964	DEPTH 91	WAVES 1 00X0	AIR T 15.5	VIS 0
CONS. NO 093	MONTH 7	MXSAMPD 01	WAVES 2 1922	WET B 15.5	STN
LAT 43-110N	DAY 15	NO.DPTH 7	WND-DIR 230	WW-CODE 45	
LON 62-060W	HR 09.2	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1018.4	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
092	0000	141	32683		2440	15016					
092	0010	1266	32756		2474	14971					
092	0020	0920	32956		2551	14851					
092	0030	0678	33108		2598	14762					
092	0050	0351	33423		2660	14635					
092	0075	0430	33627		2669	14675					
092	0085	0543	33872		2675	14727					

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1410	32683		2440	15016	0000	00000	3539
0010	1266	32756		2474	14971	0034	00002	3213
0020	0920	32956		2551	14851	0063	00006	2486
0030	0678	33108		2598	14762	0085	00012	2038
0050	0351	33423		2660	14635	0120	00025	1446
0075	0430	33627		2669	14675	0156	00048	1371

C-REF-NO 009 YR 1964 DEPTH 77 WAVES 1 00X0 AIR T 14.5 VIS 0
 CONS. NO 094 MONTH 7 MXSAMPD 01 WAVES 2 1921 WET B 14.5 STN
 LAT 43-290N DAY 15 NO.DPTH 6 WND-DIR 210 WW-CODE 45
 LON 62-270W HR 11.3 W-COLOR WND-SPD 08 CLD-TPE X
 MARSD SQ 151 C/I 1810 W-TRNSP BARO 1018.4 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
113	0000	135	31710		2377	14985						
113	0010	1360	31752		2378	14990						
113	0020	1000	31930		2458	14868						
113	0030	0615	32371		2548	14727						
113	0050	0218	33024		2640	14572						
113	0075	0233	32881		2627	14580						

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1350	31710		2377	14985	0000	00000	4137
0010	1360	31752		2378	14990	0042	00002	4128
0020	1000	31930		2458	14868	0079	00008	3370
0030	0615	32371		2548	14727	0109	00015	2511
0050	0218	33024		2640	14572	0151	00031	1638
0075	0233	32881		2627	14580	0193	00059	1758

C-REF-NO 009	YR 1964	DEPTH 265	WAVES 1 2422	AIR T 14.5	VIS 3
CONS. NO 095	MONTH 7	MXSAMPD 02	WAVES 2 2721	WET B 14.5	STN
LAT 43-530N	DAY 15	NO.DPTH 10	WND-DIR 240	WW-CODE 45	
LON 62-530W	HR 13.8	W-COLOR	WND-SPD 10	CLD-TPE X	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1016.9	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
138	0000	139	31009		2315	14989					
138	0010	1382	30998		2316	14988					
138	0020	0800	31711		2472	14790					
138	0030	0454	32416		2570	14661					
138	0049	0190	32677		2614	14554					
138	0074	0244	33128		2646	14588					
138	0098	0356	33634		2677	14648					
138	0147	0477	34176		2707	14714					
138	0196	0483	34330		2719	14726					
138	0246	0510	34444		2724	14747					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1390	31009		2315	14989	0000	00000	4729
0010	1382	30998		2316	14988	0047	00002	4724
0020	0800	31711		2472	14790	0087	00008	3239
0030	0454	32416		2570	14661	0115	00015	2302
0050	0187 B	32693		2616	14554	0157	00032	1867
0075	0248	33150		2648	14591	0200	00059	1567
0100	0363	33666		2678	14652	0236	00091	1278
0125	0439	3400 D		2697	14692	0266	00125	1106
0150	0479	34192		2708	14715	0293	00163	1006
0175	0486 C	3429 E		2715	14724	0318	00203	0943
0200	0508 G	3440 I		2721	14738	0341	00248	0888
0225	0514 D	3445 G		2724	14746	0363	00296	0863
*0250	0508	3444 B		2724	14747	0385	00349	0866

C-REF-NO 009 YR 1964 DEPTH 146 WAVES 1 2422 AIR T 17.5 VIS 6
 CONS. NO 096 MONTH 7 MXSAMPD 01 WAVES 2 2721 WET B 15.0 STN
 LAT 44-160N DAY 15 NO.DPTH 8 WND-DIR 240 WW-CODE 02
 LON 63-190W HR 16.3 W-COLOR WND-SPD 08 CLD-TPE 8
 MARSD SQ 151 C/I 1810 W-TRNSP BARO 1017.4 CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4	-P-	NO2	NO3	SIO	PH
163	0000	134	30545		2289	14967						
163	0010	1298	30547		2298	14954						
163	0019	1292	30553		2299	14954						
163	0029	0924	31070		2403	14830						
163	0048	0095	32060		2571	14503						
163	0072	0058	32405		2601	14495						
163	0096	0083	32648		2619	14514						
163	0143	0203	33059		2644	14581						

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1340	30545		2289	14967	0000	00000	4975
0010	1298	30547		2298	14954	0050	00003	4898
0020	1265 C	3059 C		2308	14945	0098	00010	4806
0030	0874 D	3113 B		2416	14812	0141	00021	3776
0050	0069 G	3211 D		2576	14493	0202	00044	2238
0075	0059	32439		2603	14497	0255	00077	1981
0100	0079 C	3271 D		2624	14514	0302	00120	1786
0125	0136 B	3293 C		2638	14546	0346	00169	1651

C-REF-NO 009	YR 1964	DEPTH 101	WAVES 1 2422	AIR T 19.0	VIS 6
CONS. NO 097	MONTH 7	MXSAMPD 01	WAVES 2 2721	WET B 17.0	STN
LAT 44-240N	DAY 15	NO.DPTH 7	WND-DIR 240	WW-CODE 02	
LON 63-280W	HR 17.4	W-COLOR	WND-SPD 10	CLD-TPE 8	
MARSD SQ 151	C/I 1810	W-TRNSP	BARO 1017.2	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	PO4 -P-	NO2	NO3	SIO	PH
174	0000	135	30291		2268	14967					
174	0010	1016	30606		2352	14855					
174	0020	0264	31466		2512	14566					
174	0030	0104	31728		2544	14500					
174	0050	0092	32066		2572	14502					
174	0075	0072	32301		2592	14501					
174	0089	0072	32335		2594	14503					

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1350	30291		2268	14967	0000	00000	5181
0010	1016	30606		2352	14855	0048	00002	4375
0020	0264	31466		2512	14566	0084	00007	2852
0030	0104	31728		2544	14500	0111	00014	2548
0050	0092	32066		2572	14502	0160	00034	2284
0075	0072	32301		2592	14501	0215	00069	2093

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